Men-at-Arms

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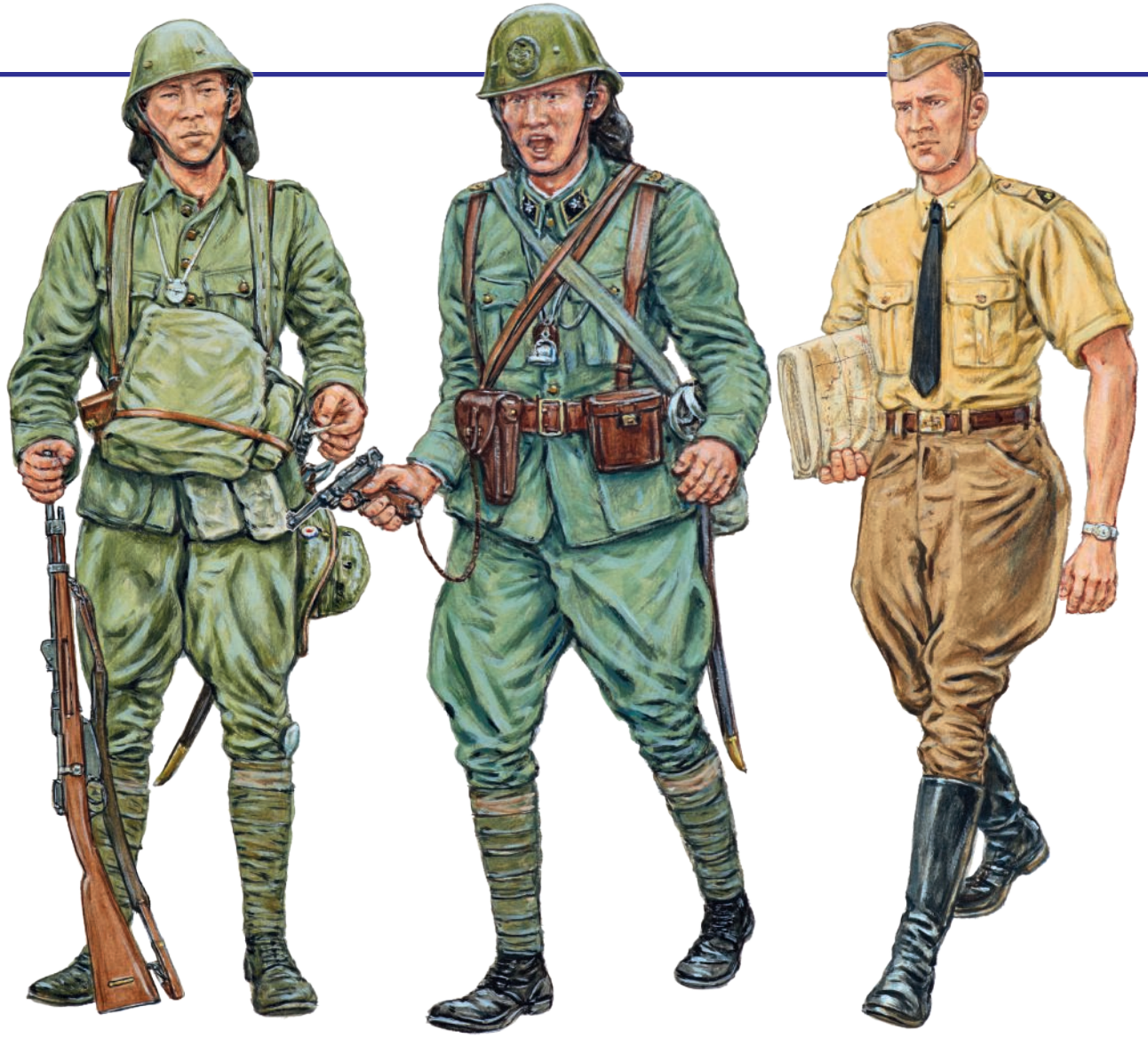
Royal Netherlands East Indies Army 1936–42



Marc Lohnstein • Illustrated by Adam Hook

CONTENTS

INTRODUCTION 3
- Defence concept

KNIL COMPOSITION 4
- Conscription & short-term contracts – volunteer corps

KNIL ORGANIZATION 7
- Command and control
- Infantry – motorization
- Tanks
- Artillery – anti-aircraft artillery
- Cavalry
- Engineers – signals – motor transport
- Medical Service – logistics
- Indigenous auxiliary corps

WEAPONS 20
- Infantry – crew-served – artillery – acquisitions

AVIATION: ML-KNIL 23

THE KNIL IN COMBAT 24
- KNIL mobilized organization, December 1941
- Preparations for defence
- Organization of Java Army, as ordered 22 February 1942
- Assessments
- Japanese plans

CHRONOLOGY 1940–42 38

BIBLIOGRAPHY 39

PLATE COMMENTARIES 40

INDEX 48

Men-at-Arms • 521

Royal Netherlands East Indies Army 1936–1942

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Series editor Martin Windrow

ROYAL NETHERLANDS EAST INDIES ARMY 1936–1942

INTRODUCTION

Lieutenant-General Hein ter Poorten was Chief of the KNIL General Staff by July 1939, and the death of LtGen Berenschot in an air crash in October 1941 resulted in his appointment as Army Commander; in January 1942 he was also appointed Commander of Land Forces, ABDACOM. Until the KNIL mobilization in December 1941 this M11 white undress uniform with a standing collar was worn for office duties.

In the 1930s, today's Indonesia was a Dutch colony known as the Netherlands East Indies (NEI), covering a vast archipelago with more than 60 million inhabitants. Of these, 59 million were Indonesians, 1.3 million 'foreign orientals' (mainly Chinese), and 240,000 Europeans (mainly Dutch). Within the latter total (among whom they were usually classed) were significant numbers of Eurasians (people of mixed race). The majority of the population and infrastructure, and the seat of the colonial government, were on the island of Java.

The colony was a global exporter of strategic materials, providing 29 per cent of the world's rubber, 20 per cent of its tin, and 97 per cent of the anti-malarial drug quinine. It also had substantial oilfields, whose products represented 13 per cent of Japan's oil imports. Following the invasion and occupation of the Netherlands by Japan's ally Germany in May 1940, and the colony's allegiance thereafter to a Dutch government in exile in London, the colonial authorities faced many difficulties. Japanese diplomatic missions pressed for enhanced access to the colony's oil, rubber and tin, but these were left unsatisfied, increasing the risk of invasion.

Defence concept

Since the mid-19th century the Netherlands had maintained a position of neutrality between the world's powers, depending upon international treaties to protect this status. Under defence principles adopted in 1927, while the Dutch government considered Japan to be the only serious external threat to its colonial empire, it also anticipated that the USA and the British Empire would come to its aid rapidly in the case of any Japanese adventure. Events in Europe in mid-1940 naturally made this question even more crucial.

The primary task of the Royal Netherlands East Indies Army (*Koninklijk Nederlands-Indisch Leger*, KNIL) was internal security – maintaining peace and order, and aiding in the control of the indigenous population where the colonial police services required such support. Defence from external threats ('neutrality enforcement') was principally assigned to the Royal Netherlands Navy, and particularly so in the 'outer regions' – the islands beyond Java and Madura, and Tarakan and Balikpapan where vulnerable oil facilities were located, and each guarded by a KNIL battalion from 1934. Beyond the main island of Java, the KNIL was neither organized nor resourced to resist a determined invasion.

Successive military cutbacks ended in 1936, when the KNIL's budget was increased for a five-year modernization programme, which focused on building up the air corps, introducing tanks, and increasing infantry

and artillery firepower. The threat became more acute with the Japanese seizure of the southern Chinese island of Hainan in February 1939, and even greater when Japan occupied French Indochina in 1940–41, bringing it new naval and air bases within range of the Netherlands East Indies.

The Japanese attack of December 1941 caught the KNIL right in the middle of its major reorganization programme. More modern weapons and tactical concepts were being introduced, motorization was taking place, and new units were being formed. The build-up in KNIL personnel was extremely heterogeneous in nature: conscripts serving their compulsory military service, reservists, veterans, short-term contract personnel, and urban and rural home guards were added to the core of Dutch and Indonesian professional soldiers. This increased the Army's manpower but damaged its cohesion, which was further affected by frequent personnel transfers between units.

KNIL COMPOSITION

The KNIL was a standing professional army of long-term volunteers, built around a European core – in 1929, comprising just over one in every five men – but predominantly Indonesian.

The Europeans (very largely Dutch) supplied virtually all of the officers, a large number of the NCOs and some of the troops. A few officers, some NCOs, and most troops were recruited from diverse Indonesian ethnic groups. As shown in the accompanying table, some 44 per cent of the KNIL were Javanese, a proportion more or less consistent with that in the population as a whole. (For security reasons, as far as possible Indonesian troops were not stationed near their birthplaces.) However, Ambonese. Manadonese and Timorese were highly overrepresented in the ranks, providing about 28 per cent of the Army from only some 1.6 per cent of the population. The majority of Indonesian military personnel were Muslims, but most Ambonese, Manadonese and Timorese professed Christianity. A balance was sought between Indonesian ethnic groups right down to section level; in 1928 typical distribution in an infantry section was 6 Manadonese/Ambonese/

Bandung, 1939: snapshot of a detachment of the Tank Experimental Unit (*Proefafdeling Vechtwagens*) taken after a four-day route march. The unit was ethnically mixed. Captain J.H.J. Brendgen (left) is wearing the old field uniform with a high standing collar; the NCOs and men have the new M37 field uniform with a turnover collar, worn here with the leather gaiters for mounted troops. All wear the 'bamboo hat' with the brim fixed up on the right side, and have holstered M11 pistols (with leather lanyards) and two-magazine pouches on their belts. As an officer, Capt Brendgren also has a just-visible *klewang* cutlass at his left hip, and the NCOs have slung binocular cases. The cheerful enthusiasm of this group is poignant when one recalls the fate of the tank unit in 1942. (KTOMM Bronbeek)

Timorese to 13 or 14 Javanese. If the sergeant section commander was Indonesian, a Dutch senior corporal (*brigadier*) would be assigned.

KNIL ethnic composition, 1929

Ethnic group	*Number*	*Proportion of KNIL*	*Proportion of population*
Europeans	8,008	20.76%	0.40%
Ambonese	4,314	11.19%	0.38%
Manadonese	5,600	14.52%	0.47%
Javanese	16,873	43.75%	46.10%
Sundanese	1,787	4.63%	14.25%
Madurese	141	0.37%	7.14%
Buginese	108	0.28%	2.54%
Acehnese	96	0.25%	1.38%
Malays	234	0.61%	1.57%
Timorese	1,406	3.65%	0.72%
Chinese	1	0.00%	2.04%
Total	**38,568**		

The KNIL did not have any separate Dutch units sent from Europe. Under a 'replenishment system', individually recruited volunteers were assembled in detachments, shipped out, and assigned to units permanently stationed in the colony. The 'field battalions' (see below, 'Organization') had separate Dutch and Indonesian rifle companies; in 1925 it was prescribed that one of an infantry regiment's companies must be all-Dutch. Internal security became the primary task of the Indonesian elements, and preparing to meet external threats that of the Dutch elements. The official languages used were Dutch and Malay; failure among all ranks to master the latter adequately tended to hamper command and control.

Training, up to full proficiency as riflemen, was provided by depot battalions on Java. Infantry training for Dutch personnel generally lasted 6 months; Indonesians were trained for approximately 7 months (Ambonese) or 8 (others). From 1936, recruits were then transferred to the outer regions for a period of almost 6 years, referred to as the 'external tour'. The cadre ranks received further instruction at the NCOs' training school. Members of the Dutch cadre were also stationed in the outer regions for a tour lasting at least 4 years.

The professional KNIL officers were trained in the Netherlands, at the Royal Military Academy (*Koninklijke Militaire Academie*, KMA) in Breda and the Higher Military School (*Hogere Krijgsschool*).

Conscription & short-term contracts

Mobilizing a volunteer army in the event of war can lead to an actual reduction in the deployable, combat-ready manpower of the peacetime force, and the peacetime formation of the KNIL anticipated a mobilization loss of about 21 per cent. As early as 1918, compulsory military service was introduced for Dutchmen in the Netherlands East Indies. Men aged 18–32 served in the Militia (*militie*), and those aged 33–45 in the Home Guard (*landstorm*). From 1925, Dutch militiamen were used to increase the wartime capacity of external-defence (as opposed to internal-security) elements, e.g. machine-gun companies, cyclists, artillery and engineers. From 1936, conscripts served between 9 and 12 months depending on

KNIL soldiers of an ethnically mixed section, photographed after returning from South Sumatra to Java on 1 March 1942. In the foreground, from left to right, are a Javanese, a Manadonese (with Madsen M15 LMG over his shoulder), and an Ambonese soldier; behind them stand a Eurasian (using a cloth helmet-cover as a beret), and a Dutchman – the only one whose helmet shows the 'lion' plate indicating Dutch rather than local or foreign manufacture. All of them wear the M37 field uniform, and helmets with leather neck flaps and (left) the cotton camouflage cover. (Beeldbank WO2 NIOD)

previous service, and a reserve officer corps was also formed. Conscripts supplemented rather than replaced the volunteers; this allowed an increase in military strength while maintaining an increased ratio of about one European to three Indonesians. The Home Guard, generally unsuitable for field deployment, was intended for internal security and guard duties. During wartime, 4 Home Guard battalions were to be formed on Java for the local defence of the ports of Tanjung Priok and Surabaya.

Extending compulsory military service to the Indonesian population would have posed financial, security and political problems. As an alternative, the colonial government expanded the possibilities for voluntary service by Indonesians. In 1938 a short-term contract for 3 years of active service was introduced in addition to the long-term regular contract, and later even a one-year contract was also instituted. In the first instance, short-service (*kortverband*, KV) personnel were used to raise existing units to wartime capacity, but a number of separate short-service companies would be formed within the infantry.

Finally, under the 1941 reorganization plan, compulsory military service for Indonesians was introduced, to supply the manpower for coastal and hinterland defence. Non-Dutch nationals aged between 18 and 45 were subject to conscription, initially for a 12-month term, and annual contingents of 3,000 men were expected. Although this ordinance applied to the entire NEI it was in practice limited to Java, Minahasa (N Sulawesi) and Ambon; in any case it came too late, and failed to raise sufficient numbers.

Volunteer corps

Germany's occupation of the Netherlands in May 1940 cut the KNIL off from its pool of European personnel, including the instructors and trainees at the Higher Military School and Royal Military Academy. To compensate for that loss, a KMA campus was temporarily opened in Bandung on 1 October 1940, for 3-year courses.

Starting from 1938, honourably discharged professional military personnel were offered voluntary enlistment in the Veteran Reserve Corps (*reserve-korpsen van oud-militairen*), to perform those law-and-order and local defence tasks of which they were judged capable. In practice, the veterans on Java mainly performed guard duties, but those in Manado and on Ambon were also assigned secondary defence tasks.

European colonial society rallied in the crisis, and a special volunteer corps was set up in 1940. These Town Guards (*stadswachten*) were assigned law-and-order tasks in their towns and immediate surroundings, but also defence against parachute attacks. Led by retired and reserve

officers, they would be equipped with motor vehicles to increase mobility. Town Guards came directly under the command of the relevant divisional or territorial commander. In parallel, Rural Guards (*landwachten*) were established in the countryside; first implemented on Java, they were extended to the outer regions in the second half of 1941. Initially the Town and Rural Guards were provisionally equipped with sporting weapons, but they gradually received rifles, pistols, and some automatic weapons. The strengths of these local guards could vary significantly. For instance, the Town Guard of Djakarta (Batavia) had 6 companies totalling some 1,350 men, while in July 1941 the Madiun Rural Guard was set up with just 45 men in two sections.

The extensive motorization effort led to a high demand for qualified drivers, which was partly met from the indigenous auxiliary corps (see below), though they lacked much military training. A Voluntary Drivers Corps (*Vrijwillige Autobestuurders Korps*, VAUBEK) was also created.

All these measures led to a significant growth in military personnel of the various categories. At the beginning of 1942, the KNIL and its auxiliary elements totalled 45,800 Europeans, 55,600 Indonesians, and 21,200 of mixed race, broken down as follows:

Professional officers	1,400
Professional NCOs & troops	40,300
Reserve officers	2,500
Short service (KV) Indonesian personnel	8,500
Indonesian veterans	4,700
Indonesian auxiliary troops	6,600
European Militia & Home Guards	21,300
Indonesian Militia	7,600
Town & Rural Guards	27,500
Voluntary drivers	2,200
Total	***122,600***

Town guardsmen on parade, wearing the uniform shirt designed for them, and bronze breast badges; compare with Plate F3. They have the M95 rifles that were standard issue for European infantry, and light belt equipment. The pouch worn by the man second from left is unidentified. (NIMH)

KNIL ORGANIZATION

Command and control

Under the colony's governor-general, command of the KNIL was held by a lieutenant-general Army Commander (*Legercommandant*), who also headed the War Department. The latter included the General Staff and various service inspectorates, and a blurring of the military and civil administration made the department notably bureaucratic. In wartime the War Dept's operational role would be exercised by the General Headquarters (*Algemeen Hoofdkwartier*, AHK), but there was no joint Army/Navy HQ below the level of the colony's governor-general. On mobilization, Field Army Headquarters (HKV) would be formed from the Operations Bureau of the General Staff, but in the event this HQ did not become operational.

The KNIL was organized into territorial commands: 'military districts' on Java and Madura, and regional 'military commands' ('territorial commands' as of 1938) in the outer regions. Java and Madura were subdivided into two military districts, and in 1922 a weak division was formed in each, headed by the district commander. In peacetime the Div HQ originally had just three officers besides the commander, and the division was a collection of separate units lacking coherent organizational links. The commander's dual divisional and territorial roles hampered effective control, and reinforced ambiguity regarding the distinction between territorial and operational units. A third division was created in 1941. In that year a division consisted of:

Divisional HQ
Infantry Regiment (3 inf battalions; motorized inf company; anti-tank/anti-aircraft company)[1]
Cavalry Squadron
Artillery Bn (3x 4-gun batteries)[1]
Engineer Co
Divisional transport unit (of Military Motor Service)
Main dressing station (of Army Medical Corps)

In December 1941 the **Army's manpower strength on Java** was as follows:

1st Military District (I Division), West Java	16,782
2nd Military District (II Div), Central Java	11,924
3rd Military District (III Div), East Java	15,361
Coastal detachments	1,330
Other territorial troops	11,300
Support troops (Town & Rural Guards, other voluntary organizations)	28,000
Aviation troops, Medical Corps, misc. personnel	3,250
Indonesian militia	6,000
Total	*93,947*

Strength in the 'outer regions':

Sumatra	9,920
Riau & Banka	690
Kalimantan (Borneo)	3,400
Sulawesi (Celebes)	3,050
Ambon	1,640
Timor	550
Total	*19,250*
Grand total	**113,197**

Infantry

The pre-war KNIL had two categories of infantry, termed 'field' and 'garrison'. Selected field infantry, in mixed Dutch/Indonesian units, were to form a mobile force to carry out operations against an external enemy, while the remainder would maintain law and order in the regiments' cantonment areas alongside the Home Guard. The entire field infantry was stationed on Java, and was organized in field battalions, to be reinforced by support and service units for operations.

1 Only I Division had 2 infantry regiments and 2 artillery battalions.

The territorial or 'garrison' infantry, which was Indonesian apart from Dutch officers and most NCOs, was widely dispersed in the outer regions to maintain law and order. Garrison battalions and companies were purely administrative entities, and personnel formed local detachments of only one or two sections. A section (*brigade*) numbered 15 rankers led by a Dutch or Indonesian sergeant; only a few of these detachments had any automatic weapons. The field battalions formed the personnel reserve for the garrison battalions. Every year a quarter of the garrison infantry had to be replaced, and a sixth of the Indonesian personnel were given two months' leave. These frequent changes among personnel hampered efficiency.

The **Marechaussee Corps,** founded in Aceh, North Sumatra, in 1890, had developed into a specialist counter-guerrilla warfare unit, and served as an organizational and tactical model for the garrison infantry. Its 1925 peacetime establishment was 18 officers, 118 NCOs, and 945 corporals and rankers, divided into companies (sing. *division*) sub-divided into sections. It was supplemented by experienced Indonesian personnel, mainly from the infantry.

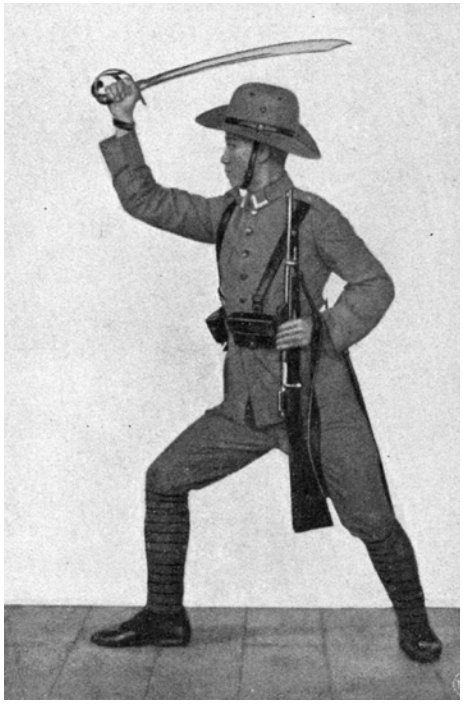
By the Army Formation Decree (*Legerformatiebesluit*) of 1937, the **field infantry** consisted of 4 regiments (designated by Arabic numbers), each with a headquarters, 3 battalions (Roman numbers), plus a combined machine-gun & infantry-gun company (*afdeling Mitrailleurs en Infanteriegeschut*). Outside the regimental organization there were 5 additional field battalions and two Marechaussee battalions. The infantry also had a cyclist company (*afdeling Wielrijders*); 4 replacement units; 2 depot battalions; and the military school. In Borneo, one field battalion (Inf VII) was located on Tarakan, and one (Inf VI) at Balikpapan. The **garrison infantry** consisted of the Marechaussee Corps, and (in 1941) 13 garrison battalions.

Before 1934 a field battalion consisted of a headquarters and 4 companies. In that year the battalion was assigned a section of 6 machine guns; in 1939 this was increased to an MG company (*mitrailleurcompagnie*), personnel being provided by dissolving the 4th Rifle Company. In 1941, the wartime organization of the 293-man MG Co – actually, a heavy-weapons company – consisted of an HQ group (4 men), and a 'train' (transport element – 98); an MG echelon with HQ and 3 MG platoons (total 117), and a mortar platoon (74 men, 6 tubes). An MG platoon had a 3-man HQ, and 2 MG sections (15 & 17 men); each section had 2 guns, 2 gun horses, 2 ammunition horses and a packhorse.

By late 1941, the rifle company (*fuseliercompagnie*) had a wartime establishment of 211 men: an HQ (9 men); 3 platoons (each 53); an anti-tank rifle group (10 men, 2 AT rifles); and a 'troop train' (33 men – see below, 'Logistics'). A rifle platoon consisted of a command group (4); theoretically, a grenade-launcher group (4); and 3x 15-man sections, each of a rifle group and an LMG (*karabijnmitrailleur*) group. In November 1941 grenade launchers were not yet available; and, given the shortage of AT rifles, in practice the AT rifle group was assigned to the battalion's MG company.

At regimental level, in 1933 the previous MG Cos were reorganized into partly motorized regimental 'MG & Infantry Gun Companies'. The company (wartime establishment 358 men) consisted of an HQ; 4x 4-gun 6.5mm MG platoons; a mortar platoon (6 tubes); a 9-gun

Pre-war photo of the European Pte C.G. Dremmen, who in 1942 served as a sergeant in the field battalion Inf III in East Java. He wears M37 uniform; his weapon is the full-length 6.5mm Mannlicher M95 rifle, with bayonet fixed, and he wears basic leather belt equipment with Y-straps and two pouches. (KTOMM Bronbeek)



An Indonesian sergeant demonstrating the stance taken when using the *klewang* to strike at an adversary's head or shoulders, while holding in his left hand the M95 carbinae. He wears pre-1937 uniform, with the NCOs' collar patch insignia in an L-shape at the front corner. (KTOMM Bronbeek)

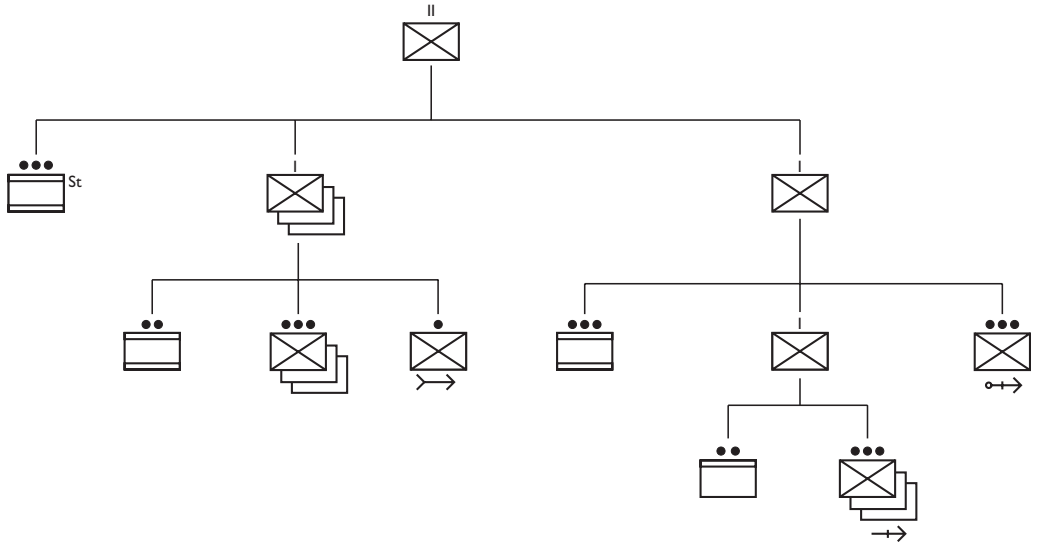
12.7mm MG platoon, and a baggage train. In 1939 the 6.5mm guns became battalion weapons, and anti-tank guns were received. Consequently, in 1940 the MG & Inf Gun Cos were reorganized into 4 entirely mechanized and motorized regimental 'AT & AA Cos' (*afdelingen Pantseren Luchtafweer*, PLA). Each had a wartime establishment of 180, and consisted of an HQ (5 men); an AT platoon with 6 Böhler 47mm guns (57); a 57-man AA platoon with 9 M30 Colt 12.7mm (.50cal) heavy MGs; and a 61-man train. The AT guns, each with an ammunition trailer, and 2 additional trailers, were towed by 8 Vickers-Carden Loyd utility tractors.

The decommissioning of the fourth rifle company in the field battalions in 1939 was partly compensated for by the introduction to each infantry regiment of a fully motorized 10th Co (designated e.g. 10-1 RI), intended for such missions as screening and reconnaissance. During mobilization, this company would be removed from one of the field battalions and placed at the disposal of regimental HQ, being replaced in the battalion with a short-service (KV) rifle company.

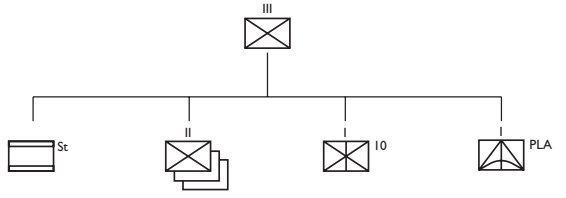
After 1938, 6 of these KV companies of Indonesian personnel were recruited, and 2 more were added in 1941. In December 1941, 4 of these companies replaced the 10th rifle companies in the infantry regiments. Two others were dissolved and, together with the 5 companies of the 2 Marechaussee battalions (also dissolved), were reorganized into MG companies destined for the defence of airfields in the outer regions. The garrison infantry was also augmented with 3 short-service companies in 1940–41.

In November 1941, the wartime personnel establishment of an infantry regiment was as below the diagram opposite:

Infantry Battalion, 1940 (wartime organization)



Infantry Regiment (1941 organization)



HQ & command group	29
Signals section	105
Train	33
Infantry battalion x 3	1,043 (= 3,129)
AT & AA company (PLA)	180
10th Co (Mot)	211
Total	*3,687*

Its weapons in addition to small arms were:

Light machine guns	90
Medium machine guns	36
Anti-tank guns	6
Anti-aircraft heavy MGs	9
Mortars (81mm)	18
Anti-tank rifles	12 (theoretically)

Motorization

In the first motorization phase the plan was to allocate about 75 trucks to each regiment, allowing one battalion to be transported. In 1934 it was decided to motorize the regimental headquarters as well. In the infantry regiment, the non-battalion 10th Rifle Co was motorized. At the beginning of 1942, one battalion per regiment was motorized in I and III Divs and 3 battalions in II Division. The motor vehicles were pooled at regimental level and made available to a battalion as needed. While period publications show that the KNIL's staff was informed about the theory of motorized transport of troops, practical experience was limited.

The KNIL's main supplier of vehicles was the large assembly plant opened by General Motors in 1927 in Tanjung Priok, the port for Djakarta. This NV General Motors Java Handel Maatschappij mainly assembled Chevrolet cars and trucks for the SE Asian market, and in its first year alone turned out 8,900 vehicles; the NEI would account for about 70 per cent of its output. Additionally, provision was made for the direct requisition of civilian trucks and buses in the case of general mobilization. Since the motorization of the KNIL was only partly achieved before the Japanese landings, such requisitions would contribute to operations during the battle for Java.

Tanks

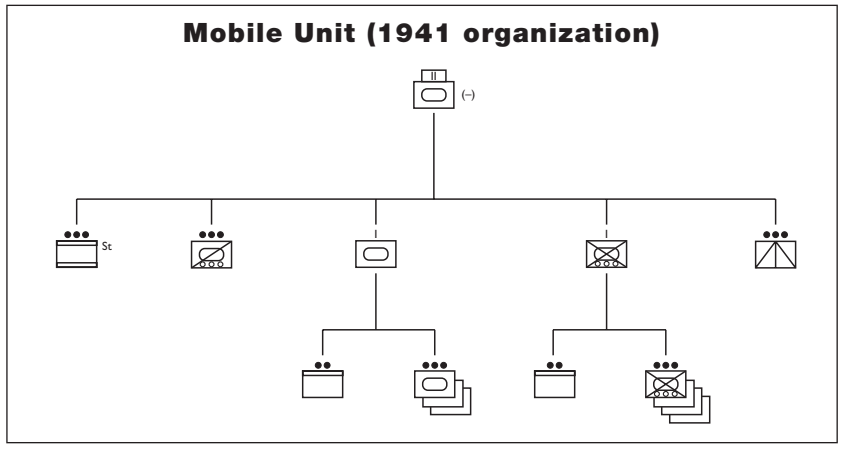
The KNIL Tank Experimental Unit (*Proefafdeling Vechtwagens*) was founded on 15 December 1937. In 1939, orders were placed with Britain for 73 Vickers-Carden Loyd light tanks and 45 command tanks (this innovative decision being well ahead of the Dutch Army in the Netherlands). Of these, only 20 tanks were delivered before the

M23 Vickers machine gun in 6.5mm calibre, which replaced the earlier Schwarzlose in the field infantry regiments' MG companies from 1927. The water jacket has been wrapped in *rattan* bamboo matting, to provide hand protection when handling the weapon after the metal had been heated by firing. The Indonesian crew wear M37 cotton field uniform and the 'bamboo hat', with the gasmask bag slung to the left hip and M95 carbine across the back. (Beeldbank WO2 NIOD)

German offensive in May–June 1940 halted all British arms exports. An alternative supplier was found in the Marmon-Herrington Company in the USA; an order was placed for 653 light tanks, but by January 1942 only a few of these had been shipped to Java. Because of their light armour and weaponry, both the Vickers and the Marmon-Herrington were of limited combat value against an opponent with more modern equipment.

In 1939 the test unit was reorganized to form the Tank Bn (*Bataljon Vechtwagens*) and was included in the infantry establishment. On paper, it consisted of an HQ, 3 companies and a depot; in practice, it was a very understrength training unit. At the beginning of 1941 a second battalion of light tanks was authorized, but was never formed. At the end of December 1941, the Mobile Unit (*Mobiele Eenheid*, Mob E) was formed around the 1st Tank Bn; in theory this was a modern combined-arms unit, though in practice it lacked enough vehicles and collective training. The Mob E consisted of an HQ with a signal platoon and a logistic and combat train; a tank company; a mechanized infantry company in Braat armoured personnel carriers, and an AT section. A Reconnaissance & Screening Unit (*Verkennende en Beveiligende Afdeling*, also known as *Afdeling Hubar*) was added, but was removed again before the Japanese landings on Java, being replaced with a recce troop. The tank company was equipped with 7 Marmon-Herrington CTLS-4TAC (two-man crew, two .30cal MGs) and 17 Vickers-Carden Loyd light tanks.

The APCs (*overvalwagens*) were lightly armoured Chevrolet trucks designed by Capt R.J. Luijke Roskott of the Engineer Corps, and 90 were produced locally. The Army model accommodated an infantry section and mounted a protected Madsen LMG. Each had a driver and co-driver/machine-gunner, and carried an infantry section with an LMG group, which was to dismount to fight on foot with support from the vehicle's LMG.



Mortar team with a 1931 French Stokes-Brandt 81mm weapon, again carrying their personal carbines slung across their backs. The December 1941 mobilized infantry battalion's machine-gun (actually, heavy-weapons) company included a 74-man platoon with 6 mortars alongside the 12 machine guns in three MG platoons. (KTOMM Bronbeek)

Artillery

In 1933 the mobile artillery of the field army consisted of a regiment with a howitzer battalion, two mountain artillery battalions and a field artillery battalion. The battalion comprised an HQ, 3 batteries of 4 guns apiece, a light ammunition column, an ammunition train and baggage transport. The existing company of fortress artillery (*compagnie stellingartillerie*) was reorganized to form the Coastal & Air Defence Artillery Corps (*Korps Kust- en Luchtdoelartillerie*), which took over the coastal batteries at the Surabaya naval base from the Navy.

In 1936, the 4 battalions were incorporated into 2 regiments of mobile artillery. During mobilization a second field-gun battalion (A II Vd) and several independent field and mountain batteries would be formed. The Coastal & Air Defence Artillery Corps was divided up. In 1939, the Coastal Artillery Corps (*Korps Kustartillerie*) consisted of a 6-company battalion, a depot company with an NCO school, and one detachment. In 1941, 3 of the 6 companies were stationed in the outer

The gunner of an anti-tank rifle team with a massively unwieldy 20mm M38 Solothurn S18-1000 anti-tank rifle, taking the improved 20x138mm round. Only 72 of the 322 ordered for the KNIL were delivered; consequently, at the end of 1941 they tended to be concentrated in a battalion's MG-and-mortar company, rather than being distributed to rifle companies as originally intended. (KTOMM Bronbeek)

1936 Model Vickers-Carden Loyd light tank. This British design weighed 3.8 tons, with 9mm maximum armour, a two-man crew, and a .303in Vickers machine gun in the 360°-rotating turret. The commander wears the tank crews' black beret, and the driver a crash helmet (see Plates D1 & D2). The registration plate on the nose was removed after mobilization; thereafter a downward-pointing orange triangle edged with black was painted on the turret, and a white 15cm-high 'QC' unit marking of the Mobile Unit on the hull sides. (NIMH)

regions and reorganized into the mixed 2nd–4th Coast & Air Defence Companies.

Since 1929 the howitzer battalion had been motorized, and in 1933 it was decided to motorize the field artillery. Rubber-tyre gunwheels were introduced, together with gun and ammunition trucks, and one tractor per battery for special haulage. The mountain artillery kept its horses (for carrying or draught), and began motorization only after mobilization in December 1941. In 1941–42 the mobile artillery was therefore partly motorized and partly provisionally equipped with 'strategic' motor transport. This involved placing the piece on a separate chassis ('buquor adapter'), or loading it onto a truck bed. Motorization increased the mobile artillery's strategic mobility, but since it was road-bound it brought no improvement in tactical mobility. The artillery had no independent role in battle, and was subordinate to the infantry, among which its units were dispersed.

Anti-aircraft artillery

In 1936 the AA artillery became an independent corps, and rapid growth followed. In January 1939 the Air Defence Artillery Corps (*Korps Luchtdoelartillerie*) was reorganized into 3 skeleton battalions, each with an HQ and one company. The corps also had a depot company with an NCO school, a replacement company, and nine detachments. During mobilization the battalions were increased to wartime strength: 1st AA Bn (*Eerste Afdeling Luchtdoel*, A I Ld) in Djakarta, A III Ld in Bandung, and A II Ld in Surabaya. Eight detachments were stationed in the outer regions; upon mobilization, 3 of these formed the AA component of the 2nd–4th Coast & Air Defence Companies. The AA units provided point defence for Djakarta, Bandung and Surabaya, for military airfields on Java and in the outer regions, and for the oil ports of Tarakan and Balikpapan (Borneo).

Four mobile AA units were planned for the field army, but at the end of 1941 the required 20mm, 40mm and 8cm pieces were not yet available. Engaging enemy aircraft at altitudes up to 1,000m (3,280ft) was left to the infantry's heavy AA machine guns. Numbers of AA pieces were limited, so the arrival of British AA artillery units in February 1942 represented an important increase in capacity.

Salatiga, 1939: a 7.5cm Bofors Model 21 mountain gun – a weapon described as 'outstanding' – in position during an exercise. The crew are wearing the M37 field uniform with the gasmask bag in the 'ready' position, open on the chest; the leather cockade is just visible on the turned-up left brim of the hats. Their personal M95 carbines are laid ready just outside this cropped photograph. (KTOMM Bronbeek)

Cavalry

As of 1937, the cavalry consisted of one regiment with an HQ and 4 horsed squadrons, 2 troops of Life Guards (*lijfwachtcavalerie*), a squadron of armoured cars, and the depot with NCO school. The armoured car *eskadron* consisted of an HQ and 4 armoured car troops, which were dispersed to the mounted squadrons. A troop (*peloton*) consisted of a section (*sectie*) of 3 armoured cars and a section of motorcyclists. The armoured car was the Alvis-Straussler AC3D, armed with a 12.7mm (.50cal) Colt-Browning MG in the turret, a 6.5mm Vickers in front of the driver and another in the vehicle.

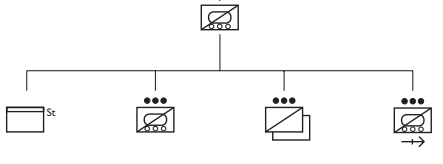
At the beginning of 1941, 3 of the mounted squadrons, the armoured car squadron and a company of infantry cyclists were reorganized into four motorized squadrons, with the horses replaced by motorcycles and jeeps. Each consisted of a squadron HQ, 2 jeep troops, an armoured car troop and a machine-gun troop. The jeep troops were equipped with the Ford GP (called in the KNIL the 'Blitz buggy') and motorcycles. The armoured car troop had one M3A1 White Scout Car and three Alvis-Strausslers; the machine-gun troop consisted of 4 White Scout Cars, each mounting a 12.7mm MG.

In February 1941, in a gesture to make up for the impounding of the ordered light tanks, the British War Office offered the KNIL 49 South African Mk III reconnaissance cars; these were shipped from South Africa to Java at the beginning of 1942, but without weapons or radio sets. A number of them were used to improvise 2 understrength squadrons.

Engineers

In 1937, the engineer arm was organized into an HQ, 3 battalions, and the Motor Transport Service (*Automobieldienst*). The battalions each had an HQ, a pioneer company (*pioniercompagnie* – which would be fully motorized), a signal company (*verbindingscompagnie*) and a searchlight

Cavalry squadron (approx. 1941 organization)



Carefully posed photo of an exercise with a Bofors 10.5cm Ld anti-aircraft gun and the fire-control group's gun-laying, ranging and calculating equipment at the barracks in the naval base of Surabaya. This weapon was trialled in 1932, and was still in service in 1942. (KTOMM Bronbeek)

company (*verlichtingscompagnie*). The battalions were dispersed across Java, making their assets accessible to the commanders of major units. At the turn of 1940–41, a fourth engineer battalion was set up in the region of II Division.

During wartime, the signal companies supplied personnel to man the equipment added to the diverse HQs. The searchlight companies would supply 7 detachments at Djakarta-Priok, Surabaya, Cilacap (Tjilatjap), Bandung, Tarakan, Balikpapan and Ambon, and a Mobile Searchlight Detachment. On mobilization 2 companies would also be formed for road construction and maintenance (the Compagnie Weg en Werken Batavia-Priok, and at Surabaya the Compagnie Weg en Werken Soerabaja); these each had a core of engineers supplemented by 200–300 locally recruited labourers.

Signals

In February 1942, Brig C.H. Simpson, CSO of I Australian Corps, reported that dedicated communications existed in the KNIL only within the division, all other communications being provided by the civilian Post, Telegraaf en Telefoondienst (PTT). There was a shortage of telephone and telegraph connections, and on Java the main lines, which followed the coasts, were vulnerable to enemy landings. The commonest means of tactical communication was the landline telephone, and small-unit connections depended upon rolling out field telephone lines.

Radio traffic was vulnerable to interception, and was therefore limited to avoid time-consuming encryption. Long-range (strategic) and short-range (tactical) radio stations were built by the Engineer Corps. Long-range stations provided connections between the higher command, the territorial commanders, divisions, oil ports and airfields; short-range stations were used at divisional and regimental level. From 1938, both types were expanded with three different portable radio sets for use in tactical communications:

Infantry radio (telegraphy – e.g. Morse code) for regimental communication; with 3m antenna, range 10km.

Artillery radio (telegraphy & voice) for communication between the division artillery commander and artillery battalions, and within battalions; range 6–8km (voice) or 20–25km (telegraphy).

Cavalry radio (telegraphy).

The regimental headquarters included a signal platoon led by an officer, with a wartime strength of 105 men in November 1941. The infantry battalion HQ included a 24-man signal section led by a sergeant, equipped with bicycles. At company level, communications were by field telephone, messengers and

A light truck (*autolette*) mounting a 12.7mm (.50cal) water-cooled M30 Colt-Browning infantry machine gun, for use against low-flying aircraft by the MG platoon of a regimental AT & AA Company (*afdeling Pantser- en Luchtafweer*, PLA). In 1942 these trucks proved to be vulnerable in battle. (KTOMM Bronbeek)

A parading cavalry squadron after the reorganization of 1941. On the right is an armoured car troop with (front to back) three Alvis-Strausslers, a light truck, and four M3A1 White Scout Cars of the machine-gun troop. The other two columns are jeep troops, with the squadron headquarters at front centre. (Nationaal Archief, Collectie DLC, CC0)

optical signalling. At the turn of 1941–42 battalion HQ received a group for ground/air communication, with a radio car, one long-range and a few short-range sets; a short-range team could be attached to each company. Artillery battalions received the same, for dispersal to forward observation teams.

Motor transport

In September 1941 the former Motor Transport Service within the Engineer Corps became the independent Military Motor Service (*Militaire Motordienst*, MMD), and after mobilization this provided the Divisional Transport Units (sing. *divisie-autotrein*, Div Aut T). These consisted of an HQ and 2 motor transport companies with a total establishment of 507 men, 311x 2-ton trucks, 2 tow trucks, and 16 meat wagons. The unit provided transport to and from the operational area, and troop transport. The second line transport of goods in the rear area was assigned to the mobilizable Transport Service (*Aan- en Afvoerdienst*,

Alvis-Straussler AC3D armoured car during a parade in Surabaya on 21 October 1938. The vehicle had four-wheel drive and dual controls, a four-man crew (each with an M95 carbine), and armament of 1x 12.7mm (.50cal) Colt-Browning machine gun and 2x 6.5mm Vickers guns. Top speed was 90 km/h on a level road. (KTOMM Bronbeek)

Poor quality but rare photograph of *overvalwagen* locally built Braat APCs. These converted civilian trucks, underpowered for the added weight of their armour, were difficult to steer on narrow roads, and had minimal cross-country capability. The armour was proof against rifle-calibre weapons, but the open troop compartment was vulnerable. (KITLV)

AAD). First- and second-line transport was motorized, but at battalion and company level transport was still by either horse-drawn wagons or pack animals.

The portable infantry short-range radio (*korte afstandradio* or *'kara')* consisted of a transmitter, a receiver and a battery, operated by a three-man team. The set could be used for radio telegraphy (i.e. Morse code) but not voice communication. The Japanese offensive of December 1941 to March 1942 took place in the wet monsoon season, which had very adverse effects on radio connections; consequently, frequent use had to be made of field telephones and messengers. (NIMH)

Medical Service

The KNIL's *Militair Geneeskundige Dienst* (MGD) was organized territorially, and in peacetime had military hospitals but not operational units. After mobilization, medical units were formed at General Headquarters, field army (*Java leger*), division and battalion level. These were, respectively, a health commission; a field hospital (*veldhospitaalafdeling*, Vd HA); a main dressing station (*hoofdverbandplaatsafdeling*, Hd VA), and an advanced dressing station (*hulpverbandplaatsafdeling*, Hp VA). These field hospital and dressing station units could form temporary mobile medical facilities, including a casualty evacuation chain.

In the front line, casualties collected at company aid posts (*gewondennesten*) were transported by stretcher or as walking wounded to a battalion aid post (*hulpverbandplaats*, Hp VP), which was set up by an Hp VA unit. The Hp VA of an infantry battalion had 2 medical officers and 32 other ranks; it provided daily medical services, and on the battlefield it performed triage and provided basic first aid. For further treatment, the wounded were sent by motor transport to a divisional main dressing station (*hoofdverbandplaats*, Hd VP), located about 3–10km behind the front. Fully motorized, this totalled 339 personnel including 14 medical officers. This Hd VP handled the transit of patients and also carried out urgent operations and blood transfusions;

'downwards' in the chain, its bearer company also provided additional 3-man stretcher teams to assist the battalion aid posts. In principle, the majority of treatment was carried out at the next point up the chain, the 300-bed field hospital (*veldhospitaal*, Vd H), preferably at an existing military medical facility between 13km and 50km behind the front.

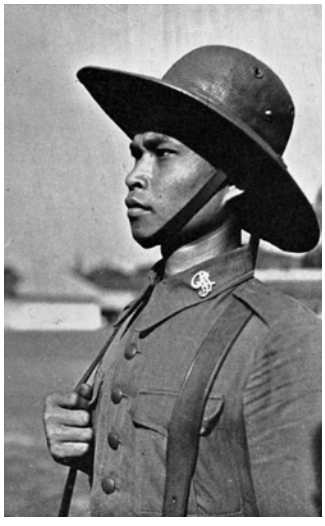
Since the KNIL used horses for transport (each field battalion having 136 in wartime) and also retained one mounted cavalry squadron (Cav 5), it also included a veterinary service (*Militair Diergeneeskundige Dien*st, MDGD).

Logistics

Procuring, managing and distributing food, clothes and equipment was the task of the Army Service Corps (*Intendance*), which in 1939 had only 17 officers and no operational units. During peacetime, KNIL company messes provided locally purchased food for the different ethnic groups. In wartime, unit rations had to come up from the rear, with local procurement as a 'coincidental benefit'. The Army Service Corps did not have its own transport, relying on the Transport Service (*Aan- en Afvoerdienst*, AAD) and the divisional transport companies to deliver goods to the main distribution points, for transfer to the unit trains.

Each combat unit had its own troop trains down to company level, for transporting supplies to last for two days. The troop train consisted of the combat train (*gevechtstrein*, GT) and the baggage train (*bagagetrein*, BT), using 2-horse so-called 'Japanese' wagons with a 300kg capacity. The combat train followed the unit into battle and carried the medical staff, ammunition, small engineer tools and telephones; at the end of 1941, the combat train of a rifle company in a field battalion included 4 ammunition wagons. The baggage train transported supplies for encampment, rations, large engineer tools, and administration-related items. It included 3 baggage wagons, 2 field kitchen wagons (in which meals were prepared) and a water-filter wagon; the kitchen and filter wagons could also be

A battalion's advanced dressing station personnel posed in column formation as if for the march; note the regulation red-cross armband worn around the upper left sleeve. At the right is one of the two-wheeled carts, drawn by local ponies, that carried dressing supplies; in the foreground are two medical officers with bicycles – note the attached medical bags. To the left of them are first-aid teams with stretchers. (NIMH)



Member of the auxiliary corps *Legioen Paku Alam* (Legion of Paku Alam), raised in Yogyakarta in south-central Java. Note the identifying yellow-metal 'PA' cipher on the M37 tunic's long-pointed collar. (KTOMM Bronbeek)

Field infantry LMG group in position during a motorized excercise (note the light trucks in the background); the Madsen M15 has a blank-firing attachment on the muzzle. The gunner is carrying his covered mess tin in a leather-strap carrier on his back, and the assistant lying to his left has a tool bag. (Beeldbank WO2 NIOD)

incorporated into the combat train. The drivers were partly supplied by the indigenous auxiliary corps, and, in both peacetime and wartime, horses and civilian drivers were also requisitioned. After the Japanese landings KNIL troops often had to go without provisions – not because of any supply shortage, but because of failed communications and lost baggage trains.

Indigenous auxiliary corps

There were several indigenous auxiliary corps on Java and Madura that did not directly belong to the Army but to indigenous rulers. In peacetime, these auxiliary troops came under the authority of the government; they were commanded by Indonesian officers, but the KNIL provided advisers and instructors. These corps were:
Legion of Mangku Negoro, in Surakarta
Legion of Paku Alam, in Yogyakarta
Barisan Bankalan, in Madura
Barisan Sumenep, in Madura
Barisan Pamekasan, in Madura
Prajoda Corps

The auxiliary corps were intended as second-line internal-security troops and to provide train personnel for the KNIL, but with the increasing Japanese threat they were also given a local-defence role. On Madura, the Barisans were deployed to defend the Surabaya naval base; the Prajoda Corps had to defend the island of Bali, and the Legion of Mangku Nagoro supplied a battalion to the field army.

WEAPONS

Infantry

Since 1899 the KNIL had been armed with Mannlicher M95 bolt-action repeating rifles in 6.5x53.5mm calibre, with a 5-round magazine, and a knife bayonet with a hooked quillon. The Marechaussee Corps was issued a handier M95 carbine version, and a 'sabre' sidearm called a *klewang* in place of the bayonet. In 1911, it was decided to equip the KNIL garrison infantry in the outer regions with the Marechaussee's weapons as standard, and non-European KNIL companies on Java followed suit in 1925. The fusiliers of the European companies, militia and home guards retained or would receive the full-length M95 rifle and bayonet. The 6.5mm rifle round lacked much stopping power.

In 1939, the Army purchased the 9mm Schmeisser MP 28/II (KNIL 'M39') sub-machine gun for issue to selected personnel in the combat branches (infantry, cavalry, artillery and engineers). Capable of selective semi- or fully-automatic fire, this weapon was effective only up to a maximum range of 150m, but was useful in encounter actions in jungle terrain.

Officers, sub-lieutenants (*onderluitenants*), warrant officers (*adjudanten-onderofficier*) and sergeant-majors of all the combat

branches were armed with the 9mm Parabellum M11 pistol, and also the Marechaussee *klewang*; for mounted troops the cavalry sabre replaced the latter. In the other services the aforementioned ranks were armed with the pistol only; this was also general issue to, e.g., signal personnel, LMG gunners, armoured vehicle drivers, and medical and veterinary personnel.

In 1915, the 6.5x53.5mm Madsen magazine-fed M15 light machine gun (*geweermitrailleur*) was acquired, for carriage on a horse. In 1926–27 the barrel was shortened to 35cm and the weight reduced from 9.2kg to 8.41kg. This 'carbine machine gun' (*karabijnmitrailleur*, km), used only by the KNIL, was thus man-portable. The Madsen constituted the rifle company's main firepower.

A Böhler 47mm anti-tank gun and ammunition trailer being towed by a Vickers-Carden Loyd utility tractor, which also accomodates the crew. In January 1940, after delivering 30 of the 75 AT guns ordered by the KNIL, the Austrian manufacturer suspended further shipments, thus halting the planned formation of a complete AT battalion (*Bataljon Pantserafweergeschut*). (Beeldbank WO2 NIOD)

Crew-served

In 1912, the Schwarzlose M12 machine gun in 6.5x53.5mm was introduced with the machine-gun companies, being replaced in the field from 1927 with the Vickers M23 in the same calibre; both were water-cooled, belt-fed weapons. The mortar platoon of the regimental MG & Inf Gun Cos received the 81mm French 1931 Stokes-Brandt; in addition to purchases from France, 164 of these were produced in the NEI under licence in 1941. The KNIL wanted to add the 47mm Brandt grenade launcher to the rifle platoon's weaponry, but only 12 of these were received, and were not distributed.

For defence against low-flying aircraft, in 1937–38 the KNIL received the water-cooled M30 Colt-Browning 12.7mm (.50cal) infantry heavy machine gun. This was fitted to a pillar mount on the open flatbed of an '*autolette*' light truck (either an Opel 1.3 litre model, or from 1940 a Chevrolet ½-ton pickup), or on a ground mounting.

Anti-tank guns and anti-tank rifles were purchased in association with the Dutch Army in the Netherlands. In 1938, the choice was the Austrian 47mm infantry AT gun produced by Gebr Böhler & Co. The Swiss 20x138mm Solothurn S18-1000 AT rifle (purchased by the KNIL as the M38) had reasonable penetration but, at 53kg, it was extremely heavy for an infantry weapon.

Artillery

The mobile artillery's equipment was gradually modernized. In 1911 the field gun battalion had 19x 7.5cm rapid-fire Krupps (7.5 Vd). In 1926, the mountain artillery was equipped with the 7.5cm Bofors M21 mountain gun (7.5 Bg), and in 1929 the 10.5cm Bofors howitzer (10.5 Hw) was introduced. In 1936–37 the range of the field guns was increased by adopting a new carriage (7.5 Vd NM).

After trials of the Bofors 10.5cm Ld in 1932, from 1936 AA defence was mainly based on the following (numbers are those in service on 1 October 1941): 8cm Bofors (x24 fixed, x4 mobile); 40mm Bofors (x12 fixed, x28 mobile); 20mm Rheinmetall-Börsig (x30); and 12.7mm Colt-Browning MG (x141 still in use, of 170).

Acquisitions

Since the NEI lacked the industrial base and raw materials to establish its own arms and ammunition industry, the KNIL was dependent on overseas suppliers. It mainly procured its equipment from the *Artillerie Inrichtingen* in the Netherlands, from Germany, from Bofors in Sweden, Madsen in Denmark, and Vickers in Great Britain. In mid-1940 European manufacturers ceased delivering outstanding orders, including Netherlands-made 6.5mm ammunition.

Before the occupation of the Netherlands, purchasing commissions were already exploring procurement possibilities in the USA and Canada. From June 1940 one of these was the Royal Netherlands Indies Ordnance Commission, and on 27 January 1941 four commissions were merged to form the Netherlands Purchasing Commission (NPC), accountable to the Dutch government in exile and the Governor-General of the Netherlands East Indies. At the end of 1940 the KNIL decided to introduce the US semi-automatic .30cal (7.7mm) Johnson M1941 rifle as its standard weapon, and although mass production had yet to begin 1,999 weapons were delivered before the March 1942 surrender. In 1941 the NPC acquired 20,000 American Enfield .30cal M1917 rifles and the necessary ammunition. A batch of .45cal Thompson M1928 SMGs was also received from the US, and Britain provided the KNIL with Italian small arms and machine guns captured in North Africa.

KNIL weapons & AFVs, January 1942

Category	Item	Numbers
Artillery	Anti-aircraft guns	96
	Field guns	44
	Howitzers	14
	Mountain guns	31
	Other mobile artillery	54
Support weapons	Anti-tank guns	30
	Anti-tank rifles	70
	81mm mortars	269
	.30cal (7.7mm) machine guns	81
	.303in MGs	366
	6.5mm MGs	393
	.50cal (12.7 mm) MGs	43
Infantry weapons	.30cal light MGs	394
	6.5mm LMGs	1,600
	Sub-machine guns	3,900
	Rifles & carbines	118,000
AFVs	Light tanks	24
	Armoured cars	12
	Scout cars	40
	APCs	90

AVIATION: ML-KNIL

In the early 1930s the KNIL's integral aviation component (*Luchtvaart Afdeling*, LA) consisted of 2 Fokker CV reconnaissance squadrons and a Curtiss P-6 fighter squadron, each with 6 machines, so the first-line force had just 18 biplanes. In 1936 the LA ordered its first Glenn Martin B-10 twin-engined monoplane medium bombers, with which the 3 existing squadrons were gradually re-equipped.

In 1939 the LA became a separate branch of the Army: the Military Aviation (*Militaire Luchtvaart*, ML-KNIL). The aviation troops branch would consist of a regimental HQ, a depot, and 4 aircraft groups (*vliegtuiggroepen*), each with 3 squadrons (*vliegtuigafdelingen*). Of the 12 squadrons, 9 would be equipped with bombers and 3 with fighters; in wartime, the flying school would additionally supply 2 reconnaissance squadrons. The first monoplane fighters arrived in 1940: enough Curtiss H75A-7 Hawks to equip a squadron. In early 1941 a squadron of Curtiss Wright CW-21B Interceptors was formed, followed by delivery of 65 Brewster B-339D Buffalos (though shortage of pilots and ground staff would allow the formation of only two squadrons). In June 1941 the ML-KNIL ordered 162 North American B-25C-5-NA Mitchell medium bombers to replace the outdated Glenn Martins; deliveries started in February 1942, but only in Australia and British India.

Pilots were recruited from among military personnel or externally, but the numbers could hardly keep up with the rapid build-up in 1936–41. Both long-term and short-term contracts were offered for officer and NCO pilots, the short-term scheme being extended to other aircrew in 1940. After the German occupation of the Netherlands in 1940, training capacity was expanded and its duration shortened, and more indigenous personnel were recruited; nevertheless, the shortfall led to the formation in 1941 of bomber squadrons with 11 aircraft and 80 aircrew, the 5-man crews being reduced to 4 men. Experienced aircrew and mechanics were frequently transferred and replaced with men fresh from training. Some bomber pilots and recently certified pilots were retrained or allocated as fighter pilots, but no tactical combat training could be provided for them for lack of experienced instructors.

On the eve of the Japanese attack the ML-KNIL possessed 7 bomber squadrons in Vliegtuiggroep I to III; 4 fighter squadrons in Vliegtuiggroep IV and V; and 2 reconnaissance squadrons (Verkenningsafdeling Vk A1 and 2).

Brewster B-339D Buffalo fighter of the ML-KNIL, displaying the NEI's black-bordered orange triangle insignia introduced from 1 December 1939. This model of the Brewster was lighter and had a more powerful engine than the B-339E used by the RAF, RAAF and RNZAF, but the Japanese Navy Type 0 'Zero' fighters were still faster and better armed. Due to a flight test accident this Brewster numbered 'B-3119' never actually made it to the NEI, but was delivered in Australia after the fall of Java. (NIMH)

ML-KNIL strength, 1 December 1941			
Aircraft	**Type**	**Number**	**Subtotal**
Bombers	Glenn Martin WH-1	11	
	Glenn Martin WH-2	23	
	Glenn Martin WH-3	29	
	Glenn Martin WH-3A	32	
			95
Fighters	Brewster B-339D Buffalo	63	
	Curtiss H75A-7 Hawk	16	
	Curtiss Wright CW-21B Interceptor	20	
			99
Reconnaissance aircraft	Curtiss Wright CW-22 Falcon	34	34
Transport a/c	Lockheed Lodestar	19	19
Transition a/c	Lockheed L212	16	16
Training a/c	various	*c.* 120	120
Total			**383**

THE KNIL IN COMBAT

KNIL mobilized organization, December 1941

General Headquarters
Java Army: I Div, II Div, III Div; Vk A 1 & 2[2]
ML-KNIL: Cdo ML (airfields, radio stations & units) Ambon II, Samarinda II, Singkawang II; Vl G I-VI, Vk A 4; ML Inspectorate
Territorial commands:
North Sumatra; Sumatra West Coast & Tapanuli; South Sumatra; Riau & Dependencies; West Borneo Department; South & East Borneo Depts; Sulawesi (Celebes) & Manado; Timor & Dependencies; Moluccas
Troop commands: Tarakan, Balikpapan, Samarinda

Preparations for defence

Prior to the outbreak of war in Asia, high-level military talks were held in November 1940 to April 1941 between Australia, Great Britain and the Netherlands East Indies; the United States joined these later as an observer.

The British base at Singapore just off the southern tip of Malaya was recognized as crucial to the defence of South-East Asia. In the event of war with Japan, the ML-KNIL would provide 3 bomber squadrons and a fighter squadron for the defence of Malacca (S Malaya). The Dutch surface fleet would provide convoy protection to and from Singapore, and Australia would station air and ground forces on the islands of Timor (partly administered by the NEI, partly by Portugal) and Ambon.[3]

ABDACOM, a joint headquarters for the American-British-Dutch-Australian theatre, became operational on 15 January 1942. Its purpose was to defend what was referred to as the Malay Barrier (Malacca,

(continued on page 33)

2 Air recce sqns Vk A 1 & 2 were available to GHQ; Vk A 3 & 5 were under operational command of the three divisions. After Vk A 5 was decommissioned at the beginning of January 1942, Vk A 3 carried out divisional recce tasks.
3 A small but courageous contribution to operations in Malaya would also be made by four Marechaussee Corps sections, totalling about 142 men including native porters, who deployed behind Japanese lines in Malacca in January and February 1942. They were tasked with conducting guerrilla warfare, and after a number of successful actions part of the detachment managed to reach Sumatra in March.

1 & 2: Indonesian LMG gunner, 10th Inf Bn; Palembang, February 1942
3: Dutch Cpl 1st Class, Motor Transport Service; Tanjung Priok, February 1942

1: Indonesian *marechaussee*, late 1930s
2: Dutch infantry Sgt, 1941–42
3: Manadonese rifleman, 10th Inf Bn; Palembang, February 1942

1: Dutch infantry 2nd Lt, 1941/42
2: Indonesian Sgt 2nd Class, 5th Cav Sqn; West Java, 1942
3: LtCol, Army Service Corps, Div III; East Java, 1942

1: Eurasian tank crewman, 1940
2: Dutch Pte 1st Class tank driver, 1941
3: LtGen H. ter Poorten, March 1942

1: 1st Lt pilot/observer, ML-KNIL, 1930s
2: Sgt pilot, ML-KNIL, 1940–41
3: Officer candidate pilot, VI G III; Singapore, December 1941

1: Dutch LMG gunner, *Marinebataljon*, 1942
2: Dutch recruit, Colonial Reserve; Netherlands, 1939
3: Dutch rifleman, Town Guard; Java, 1941

1: Eurasian seaman, *Marinevendel*; Djakarta, 1941
2: Chinese volunteer, Civil Air Defence; Djakarta, 1942
3: Indonesian Constable 2nd Class, Field Police

1: Indonesian seaman, Militarized Govt Navy, 1940
2: Dutch driver, Women's Auto Corps, 1941
3: Eurasian volunteer, Volunteer Aviator Corps, Army branch; September 1941

The GHQ plan was for emplaced anti-tank guns to defend the roads leading to Djakarta, Bandung and Surabaya while the mobile troops counterattacked advancing Japanese forces. This pre-war photo shows a Böhler 47mm AT gun with crew in position; typically, two are Europeans and two Indonesians. They wear the pre-1940 KNIL steel helmet with the oval front plate showing the Dutch heraldic lion motif. (Beeldbank WO2 NIOD)

Sumatra, Java, the Lesser Sunda Islands and New Guinea). The headquarters was established in Lembang, Java, and the British Gen Sir Archibald Wavell was appointed Supreme Commander. (In numerical terms, the KNIL contribution to ABDACOM was substantial, but since – unlike the US and Great Britain – it had no reserves, strategy was determined by those two powers.) At the end of January 1942 it was decided to transfer I Australian Corps (6th & 7th Australian Divs) and the British 7th Armoured Bde from the Middle East to the Netherlands East Indies. (These reinforcements were ultimately diverted, only a few units reaching Java.)

The KNIL command considered defending the main island of Java to be the principal task, and half of the ML-KNIL was allocated for this. In consultation with the Allies, the decision was made to station air assets as far north as possible. This led to the establishment of a chain of forward airfields, the expansion of existing ones, and the creation of an innermost line. The outer line ran from Sabang and Medan on Sumatra to Tarakan on Borneo, Langoan (Manado) on Sulawesi (Celebes), and Babo in Western New Guinea. The second line included the airfields of Pakanbaru (Pakan-Baroe) on Sumatra, Singkawang II and Samarinda II on Borneo, Kendari II on Sulawesi, Ambon II, and finally Kupang on Timor. The last line of resistance would be Palembang I airfield on Sumatra, the airfields on Java and that at Den Pasar on Bali. The primary task of the garrison troops in the outer regions had already ceased to be maintenance of internal security, and had become the defence of airfields and/or oil ports and installations.

On Java itself, the high command identified four key focuses for defence: the Army and Navy headquarters bases at Bandung and Surabaya respectively; the capital, Djakarta, and its port of Tanjung Priok; and Cilacap (Tjilatjap), the only good port on the south coast. These areas were protected both directly by coastal defences, and by anti-tank positions on the routes to Djakarta, the Priangan (Parahyangan) plateau on which Bandung is located, the north–south roads in the narrow waist of Java between Cirebon and Semarang, and the roads leading to Surabaya.

Sketch map of Netherlands East Indies and neighbouring territories, 1941–42; circled crosses indicate some of the main airfields. Space prevents the inclusion of detailed maps of the Japanese landing operations, but these may be found in Boester *et al* – see Bibliography.

A ring of fortifications was built around the latter, and in addition to the static positions mobile defence of the four key areas would be conducted by the four infantry regiments and supporting units. These mobile troops would operate offensively to the greatest extent possible, defending the key areas by carrying out counterattacks.

On 22 February 1942, only a week before the Japanese landings on Java, GHQ opted for a further concentration in West Java. The units assigned to defend Surabaya remained in place, but West Group, Bandung Group and a strategic reserve were formed in West Java from I and II Divisions. Plans for an East Group were ultimately dropped.

Organization of Java Army, as ordered 22 February 1942

General Headquarters: LtGen H. ter Poorten, CoS MajGen R. Bakkers
Strategic reserve: 2 RI (Inf IX, Inf XIV, Inf XV, 10-2 RI, PLA 2); A I Bg; Vk A 1 & 2

West Group: MajGen W. Schilling
Div Aut T, Hd VPA Div I, 3/ Vk A 3
Mobile troops:
1 RI (Inf X, Inf XI, Inf XII, 10-1 RI, PLA 1); Cav 1, Cav 5, Hubar (understrength recce unit); A I Hw; Australian 'Blackforce' (1st–3rd Inf Bns, understrength); US 2/131 FA (understrength); British B Sqn/ 3rd Hussars; Gi I
Djakarta-Tanjung Priok Coastal Front:
Landstorm I, KV Co, MG & Engineer detachments, 1 Ku Art
Other: Djakarta-Priok Road & Construction Co; British 15 Bty/ 6 HAA RA; Landstorm IV; Town & Rural Guard detachments; reserve corps

Bandung Group: MajGen J.J. Pesman
Mobile Unit (according to some sources, part of strategic reserve)
Mobile troops:

4 RI (Inf I, Inf II, Inf V, Inf IV (added),10-4 RI, PLA 4); Cav 2; A II Bg, 7th Mtd Bty; A II Vd; Gi III
Static troops:
British 78 Bty/ 35 LAA RA & 12 Bty/ 6 HAA RA; Home, Town & Rural Guard detachments; II, III, IX & X Dep Bns; KMA & CORO cadets; reserve corps

II Division MajGen P.A. Cox
Mobile troops: South Group (2 half-bns Inf XXI; Bn Mangku Negoro); Cav 4, Cav LW; Gi IV (understrength)
Cilacap Detachment: 2 inf cos, MG & mortar unit; 5 Ku Art; British 77 HAA RA (understrength) & 42 Bty/ 21 LAA RA
Territorial troops: 6 Ku Art; Home, Town & Rural Guard detachments; reserve corps

III Division MajGen G.A. Ilgen
Div Aut T, Hd VPA Div III
Mobile troops:
6 RI (Inf III, Inf VIII, Inf XIII, 10-6 RI, PLA 6); Cav 3 & 6; A I Vd, US E Bty/ 2/131 FA; Gi II; Naval Bn
Surabaya Security Force: Ku Art Bn; Landstorm II; Barisan I–IV
Territorial troops: Landstorm III; Home, Town & Rural Guard detachments; reserve corps

Java Air Command MajGen L.H. van Oyen
BRITAIR: RAF 242 & 605 (F) Sqns, 1 (GR) Sqn, 84 & 211 (B) Sqns
ML Command: Vl G I–V
East Group: USAAF 17 Pst Sqn; 27, 7 & 19 Bomb Groups
Reconnaissance Group: GVT 2, GVT 5–8, GVT 16–18; RAF 205 (FB) Sqn; USN Patrol Wing 10
Air Defence Djakarta Control Sector: A I Ld; British 242 Bty/ 48 LAA RA & 239 Bty/ 77 HAA RA
Bandung Air Defence Command: A III Ld; British 69 Bty/ 21 LAA RA & 95 Bty/ 48 LAA RA
Surabaya Air Defence Command: A II Ld
Combined Operations & Intelligence Centre (COIC)

Assessments

In November 1941 an Australian officer, Maj J.H. Brown, visited Java and attended several military exercises intended to practise offensive operations. He reported some important shortcomings:

'No coordinated fire plan had been prepared, nor had any recce been made by commanders… Three hours after daylight the two attacking battalions had moved forward about a mile and, still well behind the front line, were having breakfast. The… attack suffered from lack of drive from above, and would have been fatal in practice.' Major Brown concluded that the 'infantry and artillery are generally well equipped, but unlike [in] our own army, equipment is considerably ahead of training'. He considered the main weakness to be 'in the battalion and regimental commanders, who lack practical experience'.

In February 1942, LtGen Sir John Lavarack, GOC I Australian Corps, described the quality of the KNIL as 'disturbing […] Its capacity for

resistance against a strong attack will not be great. The Dutch themselves will fight, but they are inexperienced and not… highly trained. The rank and file, mostly local troops, don't look very stout... [The KNIL] rely very largely on civil sources for their supply, transport, repair, signals, provost and other services, and are consequently not mobile '. The KNIL was therefore 'incapable of transfer to other areas, such as Sumatra, or even [to] the central zone of Java itself. A NEI division, if transferred, say, to South Sumatra, would be unable to fight.' The Australian Army's CGS, LtGen V.A.H. Sturdee, concluded that the KNIL 'should be regarded more as well-equipped Home Guards than an Army capable of undertaking active operations in the field'.

Five Indonesian riflemen of field battalion Inf X photographed on 14 February 1942, the day of the Japanese parachute and amphibious attacks at Palembang, Sumatra. Inf X nearly drove the IJA paratroopers out of one oil refinery, but the reported approach of further reinforcements landed by the 38th Div caused the cancellation of attacks planned for 15 February. These soldiers wear M37 field uniforms with KNIL helmets lacking the 'lion' plate, and are armed with the M95 carbine and the *klewang* (compare with Plate B3). Hand grenades are visible carried hanging from the belt in cloth bags. (KTOMM Bronbeek)

The KNIL and its allies were defeated by a well-coordinated Japanese joint operation carried out with aggressive efficiency. The KNIL lacked, at every level, combat experience and training in modern warfare, and suffered from weak command and control. This combination led to decreasing morale and effectiveness.

Japanese plans

The Japanese also estimated the KNIL's capacity to resist a Japanese land attack as low. The army on Java was 'built around a core of two divisions, but with about two-thirds of the force consisting of indigenous troops, they do not have much fighting spirit. […] If it were possible to land unexpectedly and carry out a surprise attack, we could probably force the surrender of the whole Dutch East Indies Army on Java within a couple of days with only one of our brigades.'

Despite this dismissive opinion, for the offensive against the NEI the Japanese formed the Sixteenth Army under LtGen Imamura Hitoshi. This consisted of 3 divisions and a regimental combat group: 2nd Div, 56th Mixed Infantry Group (Sakaguchi group), 38th and 48th Divisions. The army was supported by the Third Air Force and the Third Fleet. The offensive would depend on the success of Japanese operations elsewhere, and on speed before Allied reinforcements could arrive. Malacca (S Malaya), British Borneo and the Philippines would first have to be captured as springboards for the invasion, and two of the allocated divisions were deployed for preceding operations in China and the Philippines.

The offensive would follow three axes of advance: via the South China Sea, the Makassar Strait between Borneo and Sulawesi, and the Banda Sea (Molucca Passage) between Sulawesi and New Guinea. In Borneo, the goal was to capture the oil production areas of Tarakan and Balikpapan, and on Sumatra, those at Palembang. For the invasion of Java, Japanese airfields would have to established at Palembang, Kuching (British W Borneo), Banjarmasin (Dutch SW Borneo), Makassar (SW Sulawesi) and Kendari (SE Sulawesi). The islands of Ambon and Timor also had to be occupied to secure the Japanese left flank and cut the supply route from Australia. Japanese bases would have to be installed at Manado, Tarakan and Balikpapan before airfields could be established in southern Borneo and southern Sulawesi.

CHRONOLOGY

1940:
10–14 May German invasion of Netherlands forces surrender of Dutch Army on 14th.
15 July Under German occupation, Dutch Army disbanded.
September French Vichy government forced to accept Japanese occupation of northern Indochina.

1941:
July Japanese occupation of southern Indochina.
1 December ML-KNIL is increased to wartime capacity.

(***7–8 December*** *Japanese attacks on Pearl Harbor, Malaya, Hong Kong and Philippines.*)

8 December The Netherlands declares war on Japan. Partial mobilization in the 'outer regions', and of coastal and AA artillery on Java, Madura, Bali and Lombok.
9 December ML-KNIL Aircraft Group VI G III plus a fighter squadron fly to Singapore to operate with RAF & RAAF.
11–12 December General mobilization of KNIL.
12 December Australian **'**Sparrow Force' lands on Timor, and 'Gull Force' on Ambon (each 1,000-plus strong).
17 December 'Gull Force' disembarks on Timor.
KNIL-Australian expedition disembarks at Dili, Portuguese Timor.
24 December Japanese take Kuching (British W Borneo), but as airfield proves unsuitable they plan to take Singkawang II (Dutch E Borneo).
27 December Japanese forces occupy NEI Tambelan islands in South China Sea.
29 December USAAF 19th Bomb Group transfers from Australia to Malang, Java.

1942:
10 January Arrival of British Gen Wavell, ABDACOM, at Djakarta.
11 January Japan declares war on the Netherlands.
HQ US 26th Fld Arty Bde & 2/131 FA Regt disembark in Surabaya, Java. Japanese landings on Tarakan (E Borneo) and at Manado (N Sulawesi); Manado garrison quickly neutralized by amphibious and airborne assaults.
13 January After fierce resistance, KNIL garrison on Tarakan surrenders; KNIL first line of air defence is thus broken.
15 January ABDACOM is activated.
18 January HQ of RAF 225 (B) Group transfers from Singapore to Palembang II, Sumatra. (This was a secret airfield, which was never attacked by the Japanese.)
24 January From Manado, Japanese land at Kendari (SE Sulawesi), quickly capturing key airfield.
Landing at Balikpapan (E Borneo) is hardly resisted.
Heavy Allied air and naval attacks fail to halt convoys.
27 January Japanese occupy destroyed Singkawang II airfield (E Borneo).
30 January Japanese occupation of Pontianak (W Borneo).
31 January Joint IJN & IJA landings on Ambon capture Ambon city.
1 February KNIL troops on Ambon surrender. HQ RAF No. 226 (F) Group formed in Palembang, Sumatra.
2 February British 6 HAA Regt (understrength) & 78 Bty/ 35 LAA Regt arrive in Palembang.
3 February Surrender of Australian 'Gull Force' on Ambon.
4 February Naval action in Makassar Strait; Japanese air attacks on Allied naval Combined Striking Force.
British HQ 16th AA Bde, 4 HAA Regt, 21 & 48 LAA Regts disembark at Djakarta.
7 February Japanese occupy Samarinda (E Borneo).
9 February Japanese landing captures Makassar (SW Sulawesi).
10 February Japanese occupy Banjarmasin airfield (SE Borneo).
14 February British B Sqn/ 3rd Hussars disembark in South Sumatra.
Japanese paratroop and amphibious landings at Palembang, targeting airfield Palembang I – a key RAF & RAAF base – and oil refineries. These are defended by Allied personnel, strong KNIL garrison bn, and field bn Inf X. Despite fierce resistance, and successful counterattack by part of Inf X, both objectives are taken.
15 February ABDACOM decides to evacuate S Sumatra.

(***15 February*** *British, Indian and Australian garrison of Singapore surrenders to Japanese*.)

19 February Japanese landing force captures Bali.
7th Australian Div advance guard disembarks at Djakarta and forms 'Blackforce', but original decision to deploy entire I Australian Corps to Java is rescinded.
19–20 February Naval battle in Badung Strait (Bali).
20 February Japanese seaborne and airborne landings on Dutch and Portuguese Timor capture Kupang and Dili; KNIL second line of airfields is thus broken, and Java cut off.
22 February Decision to withdraw USAAF from Java.
23 February ABDACOM is dissolved. After fierce fighting, Australian 'Sparrow Force' on Dutch Timor surrenders.
27 February USS *Langley* with air reinforcements is sunk south of Java.
27–28 February Seeking to intercept two Japanese landing fleets approaching Java, Allied naval Combined Striking Force is virtually destroyed by strong IJN forces in Battle of the Java Sea.
28 February to 1 March Japanese landings – under Allied air and naval attacks – at three places on north coast of Java. Western Force lands 2nd Div in Banteng Bay at NW tip, aiming for Bogor (Buitonzorg) and Djakarta, and Shōji regimental group 250km farther east at Eretan Wetan. Eastern Force (48th Div and Sakaguchi regimental group) lands at Kragan, with dual objectives of Surabaya to the east and Cilacap on south coast.

KNIL GHQ greatly overestimates Japanese strength, but in fact the Java Army and Sixteenth Army are almost equal numerically: in West Java, 23,500 Japanese troops face 23,600 KNIL and Allied soldiers. However, the KNIL suffers both from inadequate command and control, and from lack of support by the indigenous population; desertions among

Indonesian troops will be significant. The Japanese have 91 medium and light tanks, against 40 Allied light tanks. On 1 March, Japan can deploy 160 fighter aircraft and 185 bombers, while the Allies have 47 and 39 respectively (though the Japanese will not enjoy complete air superiority before 4 March).

1 March Japanese Shōji detachment captures airfield at Kalijati. USAAF begins evacuation to Australia.

2 March Counterattack by KNIL Mobile Unit at Subang, E of Kalijati, fails owing to lack of infantry and artillery support.

2–5 March Australian-British-US 'Blackforce' holds up advance of IJA 2nd Div at Leuwiliang, NW of Bogor.

3 March Counterattack on Shōji detachment by reinforced 2 RI and Teerink Bn Group neutralized by heavy, unopposed air attacks, owing to air raid that morning on Andir airfield (Shōji describes counterattacks as 'weak and uncoordinated').

Last KNIL troops on S Sulawesi surrender.

4 March GHQ orders KNIL West Group to concentrate on Bandung Plateau.

5 March KNIL abandons Djakarta, which is occupied by Japanese.

5–6 March Shōji detachment captures Ciater (Tjiater) Pass, exposing road south to Bandung Plateau.

7 March KNIL Bandung Group offers local surrender.

7–8 March Cilacap, defended by South Group (weak rump of II Div), falls to Sakaguchi detachment.

8 March After failed III Div counterattack, Surabaya falls to IJA 48th Division. KNIL and civil administration both disintegrating; surrender negotiations begin at Kalijati.

9 March KNIL on Java surrenders.

12 March Remaining Allied forces on Java surrender.

12 March Japanese Guards Division (from Twenty-Fifth Army, Malacca) lands in N & E Sumatra.

28 March KNIL troops on Sumatra surrender.

* * *

According to the incomplete lists of the Dutch Wargraves Commission, approximately 1,500 KNIL and 1,650 Navy personnel, of all races, lost their lives between December 1941 and March 1942 inclusive. Zwitser's figures for prisoners of war are as follows:

Europeans, KNIL	38,400
Royal Netherlands Navy	3,800
British	5,600
Australians	2,800
Americans	91

Zwitser gives no figures for Indonesian personnel captured; a Japanese source (Senshi Sōsho) claims an overall total of 66,219 NEI military prisoners. Japanese releases of Muslim prisoners commenced as soon as April 1942, but Christian Ambonese and Manadonese were not released.

BIBLIOGRAPHY

Bakkers, R., *Het Koninklijk Nederlands-Indische Leger voor en gedurende zijn strijd tegen de Japanse invasie* ('The Royal Netherlands East Indies Army before and during its battle against the Japanese invasion'), typescript, *sine loco* and no date (1947)

Boer, P.C., *De luchtstrijd rond Borneo* (The air battle around Borneo). *Operaties van de Militaire Luchtvaart KNIL in de periode december 1941 tot februari 1942* ('Operations by the KNIL Military Aviation during the period December 1941 to February 1942') (Van Holkema & Warendorf; Houten, 1987)

Boer, P.C., *The Loss of Java: The Final Battles for the Possession of Java fought by Allied Air, Naval and Land Forces in the period 18 February – 7 March 1942* (Singapore University Press)

Boer, P.C., *Aircraft of the Netherlands East Indies Army Air Corps in crisis and war times, February 1937 – June 1942* (Batavian Lion International; Amsterdam/Berlin, 2016)

Boester, A.J.Th., A. Treffers, C, van den Hoogenband & L. Schotborgh, *Nederlands-Indie contra Japan, Deel 7: De strijd op Java* (Staatsuitgeverij; 1949–61)

Leeuwen, G.I. van, *De Intendance in het voormalige K.N.I.L.* ('Logistics in the former KNIL') (A.T. Verschoor & Zoon; Culemborg, 1958)

Nortier, J.J., P. Kruijt & P.M.H. Groen, *De Japanse aanval op Java* ('The Japanese Attack on Java') (De Bataafsche Leeuw; Amsterdam, 1994)

Remmelink, W. (ed & trans), *The Invasion of the Dutch East Indies* (Leiden University Press, 2015)

Teitler, G., 'Het KNIL en de Indische defensie', in Teitler, G. (ed.), *De val van Nederlands-Indië* ('The Fall of the Netherlands East Indies') (De Bataafsche Leeuw; Dieren, 1982), pp.42–58

Teitler, G., *De Indische Defensie en de Bezuinigingen* ('The East Indies Defence and the Cutbacks'), Contributions from Military History 16 (Military History Section of Army Staff; The Hague, 1985)

Vries, G. de & B.J. Martens, *Nederlandse vuurwapens. KNIL en Militaire Luchtvaart 1897–1942* ('Dutch Firearms. KNIL and Military Aviation 1897–1942') (De Bataafsche Leeuw; Amsterdam, 1995)

Zwitser, H.L., 'Enkele gegevens over krijgsgevangenen en gesneuvelden onder de Europese militairen van het Koninklijk Nederlands-Indisch Leger gedurende de oorlog in de Pacific 1941–1945', in *Mededelingen van de Sectie Krijgsgeschiedenis Koninklijke Landmacht* (Statements from Military History Section of Royal Army) 1 (1978–1), pp.5–23

PLATE COMMENTARIES

1937 service uniform & insignia

The tunic was made of a 'grey-green' (actually, olive) cotton material termed 'Garoet-B', and closed by 7 removable 13mm bronze buttons of Dutch 'lion' pattern; it had a 12cm–15cm central rear vent. The turnover (stand-and-fall) collar was 4cm–5.5cm high, with about 1mm of a white lining showing inside the top. The pointed shoulder straps were 4.5cm wide at the shoulder. Two pleated breast pockets and two larger unpleated skirt pockets had buttoned, pointed flaps; there was an interior 'watch' pocket and another for a field dressing. The shoulder-strap and pocket buttons were smaller.

Unmounted branches wore matching trousers of tapered 'breeches' cut, with puttees, and black ankle-high field shoes with leather heel and toe pieces and canvas uppers for quicker drying in wet terrain. Mounted branches wore true riding breeches with doubled reinforcement inside the knees, high black leather gaiters with buckled straps and spurs (see Plate C2).

The service cap had a soft crown overhanging a stiff band faced with braid; centred frontally on this was a gold-edged cockade with an orange centre. Ranks below sergeant had a green ribbed band and a metal cockade; NCOs had a black silk band and silk cockade. The peak (visor) and chinstrap were of black lacquered leather, the latter with a sliding adjustment buckle and two small flat buttons. Officers' caps had a black so-called '*état-major*' band in a repeating 'W'-pattern weave, edged top and bottom for field ranks (major and above) with gold or silver 'branch-metal' piping; buttons were plated, and the cockade featured bullion thread. General officers' cap peaks had gold oakleaf edgings (see Plate D3).

European rifleman in M37 field uniform and leather-flapped KNIL steel helmet, with slung M95 rifle but only one belt pouch. The gas mask is at his left hip in the 'non-combat' position. The grey-green field pack has a spare pair of field shoes strapped to the sides. The three-item mess tin set in its cover is attached to the pack, as is a folded woven-fibre sleeping mat. (NIMH)

Rank insignia (see table opposite) were displayed on removable collar patches, for officers with 3-point rear edge (see page 4) and rhomboid angled at about 70° for other ranks (see page 10). For officers, sub-lieutenants, officer candidates, warrant officers and sergeant-majors these were 4.5cm high and 6cm long; and for ranks below sergeant-major, 4cm by 5cm. Junior officers' patches were of branch colour edged with gold or silver piping; those of field and general officers were of metallic braid or metal, edged with branch colour. The patches for below warrant officer were grey-green with a stitched L-shaped braid. Reserve Officer Training Corps (CORO) trainees displayed a gold 'Hungarian' braid with a trefoil knot on the collar patch, at the bottom for officers and above the rank insignia for sergeants. KMA cadets displayed an oblique stripe at the rear of the collar patch, of blue-piped yellow-orange silk broken by three narrow blue lines.

On the shoulder straps all personnel displayed a branch-of-service badge in matt bronze. (See table on page 43 for branch insignia, colours and 'metals'. Note that gold/yellow stripes on collar patches for the NCO ranks were reversed to silver/white in the cavalry, administrative, pharmacy and veterinary branches.)

Men below the rank of warrant officer in auxiliary corps wore a brass letter or cypher on the collar, and officers and warrant officers on the shoulder straps, as follows:

Veteran reserve corps	R
Legion of Mangku Negoro, in Surakarta	MN
Legion of Paku Alam, in Yogyakarta	PA
Barisan Bankalan, in Madura	B
Barisan Sumenep, in Madura	B
Barisan Pamekasan, in Madura	B
Prajoda Corps	P

The KNIL did not wear formation insignia. Emblems displayed on upper left sleeves, on a 6cm-square uniform-cloth patch, might identify qualifications of various kinds (see A3). However, while unqualified personnel of the hospital service wore a red cross on the sleeve, qualified personnel showed a yellow or white metal cross on the collar.

A wool serge temperate-climate version of this service uniform, in a light green, was worn in the Netherlands (see F2). Officers and NCOs down to sergeant also had a white uniform, worn as office dress prior to mobilization in December 1941; officers and warrant officers also had an optional mess dress with white jacket and black trousers, and a dark blue full-dress '*attila*' uniform.

Field uniforms

The 1937 cotton service uniform was worn in the field with minor adjustments and appropriate equipment. The tunic had a down-turned collar and plain bronze buttons. Ranks below sergeant-major had two rear upwards-buttoning belt support loops, and for field and guard duty shoulder-strap buttons were replaced with studs. (See also under Plate A1A.)

Rank insignia were on removable rhomboid collar patches, angled at 60°. For officers, sub-lieutenants, officer candidates and warrant officers these were 4.5cm high and 5.5cm long; for sergeant-majors, 4cm by 5.5cm; and for ranks below sergeant-major, 3.5cm by 5.5cm. The braid of ranks sergeant-major and below was stitched in a straight line. Otherwise the same as with the service dress.

Rank	Collar patch
Lieutenant-General	4 silver stars on gold braid (NB all rank stars 6-point). *Plus on sleeves,* 3 separate metal stars
Major-General	4 stars, foremost 2 gold, others silver, on gold braid. *Plus on sleeves*, 2 separate metal stars
Colonel	3 silver stars on gold braid
Lieutenant-Colonel	2 silver stars on gold braid
Major	1 silver star on gold braid
Adjutant (Major)	1 gold star on gold braid
Captain	3 silver stars on branch colour
Adjutant (Captain)	1 gold (foremost) & 2 silver stars on branch colour
First Lieutenant	2 silver stars on branch colour
Adjutant (First Lieutenant)	1 gold (foremost) & 1 silver star on branch colour
Second Lieutenant	1 silver star on branch colour
Adjutant (Second Lieutenant)	1 gold star on branch colour
Sub-Lieutenant (*Onderluitenant*)	2 silver half-ball studs on branch colour
Officer Candidate (*vaandrig*)	As sub-lieutenant, but foremost stud gold
Warrant Officer (*Adjudant-onderofficier*)	1 silver stud on branch colour
Warrant Officer Instructor (*Adjudant-onderofficier instructeur*)	1 silver stud on branch colour, blue frontal piping
Sergeant Major (*opperwachtmeester*) Instructor	2 wide horizontal gold braid stripes on grey-green
Sergeant-major Administrator	2 wide gold braid stripes with blue centre-lines, on grey-green
Sergeant (*wachtmeester*) 1st Class	Narrow gold braid stripe above wide gold braid stripe, on grey-green
Fourier	As above, wide stripe with blue centre-line, on grey-green
Sergeant (*wachtmeester*) 2nd Class	Wide gold braid stripe centred on grey-green
Corporal 1st Class *(brigadier)*	Narrow yellow stripe above wide yellow stripe, on grey-green
Corporal	Wide yellow stripe centred on grey-green
Private 1st Class	Wide red stripe centred on grey-green

In the field all ranks wore a deep-crowned, wide-brimmed, woven-fibre 'bamboo hat', coloured green from 1937 (see e.g. B1). The brim had brown leather trim, and press studs for holding either side folded up against the crown; the latter had two ventilation grommets, and a brown leather band and buckled chinstrap. Under the brim, exposed when it was fastened up, was a leather tricolour cockade in the Dutch national colours of blue/white/red centre. An alternative was a Model 1941 field cap (*bivakmuts*) with a buckled cloth chinstrap. Shaped like a sidecap, this had the turn-up part divided into two curve-topped flaps, front and back. The top edge of the front flap was piped with the branch colour, with an additional piping in gold or silver 'metal' for field-grade and general officers, who also had bullion piping along the cap's top edges. The branch badge was worn on the right front of the cap (see C3). Older models of field cap were also still worn.

In 1936–38, 50,000 steel helmets of the 'KNIL' model were ordered. Based on the Dutch Army's M1927, this did not extend as far down at the back, instead having a black leather sun-flap attached to the black leather liner straps. An oval frontal plate bore the Dutch heraldic lion motif (see C1 & G3a). For camouflage a grey-green cotton cover was attached (see A1 & 2) by a drawstring, and the flap was painted green outside. After the German occupation of the Netherlands in May 1940 the Dutch supplier ceased delivery; replacement suppliers included the Milwaukee Saddlery Company (Milsco) in the USA, and local firms in Surabaya (probably Borsumij Pers en Stampwerkfabriek at Ngagel, and Machinefabriek Braat NV). The 'lion' plate was probably omitted by all these later suppliers (see A3).

On 5 September 1941 the tunic was ordered replaced for field dress with a shirt (though the tunic was also still seen in the field until the end of hostilities). This had an open flat collar, shoulder straps, long sleeves, expanding breast pockets with buttoned flaps, and 5 front buttons (see C3). Branch insignia were worn on the shoulder straps, and rank insignia on newly designed triangular collar patches with the top corners cropped. For ranks below warrant officer the patch was grey-green, with the formerly straight rank stripes presented as downward chevrons (see F3b). For junior and warrant officers the patch was branch-coloured, officers' patches having piping on the bottom two edges (see B1a); field and general officers' patches were of branch 'W'-pattern braid edged with branch colour (see C3a). All-metal patches were also worn. Officers and senior ranks could wear the shirt with shorts and long green socks (see C3), rankers with shorts and puttees.

In November 1941 the wear of dark blue sports shorts in combination with grey-green tunics and puttees was authorized during exercises and for office duties. Shortly afterwards grey-green shorts were introduced for wear with the September 1941 field shirt.

Equipment

Ranks down to sergeant-major wore brown leather 'Sam Browne' belts, with a single diagonal crossbrace in service dress, and with both braces vertically over the shoulders and

LMG gunner in the prone position, in an image from a 1935 training booklet. He has an infantry M15 pouch holding two magazines on the left of his belt, and his mess tin-&-ration carrier on the back. (Private collection)

crossing at the back when in the field. Additional equipment was attached to the belt or worn slung diagonally (see C1 & C3).

Other ranks in rifle units wore a waist belt with a single-prong brass buckle, supported by Y-straps. The items normally attached to this, reading from left of the buckle around the waist, were a pouch for 50 cartridges in 5-round clips; bayonet (Dutch personnel) or *klewang* cutlass (Indonesian personnel); hook for the gasmask bag; *patjolpik* (Indonesian entrenching tool); mess tin and emergency ration in cylindrical grey-green cover with strapping carrier; water canteen with grey-green felt cover, in strapping carrier; second ammunition pouch. (Cadres wore a single pouch.) For normal duty the satchel for the NM ('new model') gasmask was slung to hang behind the left hip, but its 'ready' position was on the chest, open for quick access. The field pack for marching order was made of grey-green linen with brown leather trim; its contents included spare underwear, washing kit, and items for weapon maintenance.

* * *

A1 & A2: Indonesian LMG gunner, 10th Infantry Battalion; Palembang, February 1942

This Javanese regular soldier of Inf X, 4 RI is advancing against Japanese paratroopers; his light machine gun group consists of a squad leader (*sergeant 2de klasse*), gunner, assistant gunner and five riflemen (*handlangers*). He wears the KNIL steel helmet with a cotton camouflage cover, M1937 uniform, and canvas-and-leather field shoes. He is armed with the KNIL's shortened 6.5mm Madsen

Details of the 'bamboo hat', here worn by the crew of an M23 Vickers gun. (KTOMM Bronbeek)

M15 'carbine machine gun' (note leather-reinforced blue canvas sling), and a holstered 9mm M11 Parabellum pistol. The small LMG accessories pouch is on the left front of his belt – see central figure in photo on page 6.

The rear view shows the belt-supporting Y-straps, water canteen, and slung gasmask bag. He also carries an asbestos mitten, for handling the Madsen barrel when heated by firing. An entrenching tool (*patjol pikhouweel*) was not issued to LMG gunners. The assistant gunner and two riflemen of the LMG squad each had a backpack to which two magazine pouches were strapped crossways, curve uppermost; the squad thus carried six 24-round magazines plus one on the gun.

A1a: Representative dull bronze branch-of-service insignia, here for infantry. In the field these were displayed on the shoulder straps only by officers, sub-lieutenants, officer aspirants and warrant officers, in 'handed' pairs (here, left side).

A3: Dutch corporal 1st class, Military Motor Service; Tanjung Priok, February 1942

Given his age, this *brigadier* of the *Militaire Motor Dienst* on quayside guard duty at the port for Djakarta is probably a mobilized conscript. His helmet is locally made, and lacks the frontal plate with the Dutch heraldic lion. His collar rank patches bear narrow above wide yellow stripes. Note the left sleeve patch with the red branch symbol of the MMD. This, the collar patches, and the bronze buttons were all removable when the uniform was washed. He is armed with the regulation 6.5mm Mannlicher M95 carbine, and his belt and Y-straps support the bayonet and one 1931 pouch.

A3a: A3's collar rank patches (here, right side)

B1: Indonesian marechaussee, late 1930s

The Marechaussee corps in Aceh (North Sumatra) and the Marechaussee battalions on Java were internal security troops. Insurgents in Aceh were notorious for surprise attacks using a *klewang* cutlass. To counter this, patrols expecting contact maintained close formation in this 'alarm position' (*sikap awas*), with carbine ready to fire and *klewang* in the right hand, ready to drop to hang on its wrist loop. The 'bamboo hat' could be worn with the brim down, or turned up and fastened on either side. The M1937 tunic shows the Marechaussee's distinctive stylized sideways 'M' collar insignia and naval-style cuff stripe wth a 'curl', both in orange. (Ranks from warrant officer up wore both the sideways 'M' on the collar patch and the cuff stripe in gold.) The leather equipment is of 1898–1907 type, with 50-round pouches (obscured here) measuring 17cm x 8.5cm. On the outer islands a spare pair of shoes was carried on the sides of the leather-reinforced canvas field pack; with the introduction of the '1931 kit', carrying the covered mess tin either on the back of the belt or on the *veldzak* became optional.

B1a: Representative officer's collar patch for the M1941 shirtsleeve uniform, with rank of Marechaussee first lieutenant adjutant (gold star forward, silver star rear, under gold 'M' shape) on the black ground of combat branches.

B2: Dutch infantry sergeant section commander, 1941–42

This *brigadecommandant* wears the Dutch-made KNIL steel helmet, officially introduced only on 4 November 1940 but in fact ordered in 1937–38, complete with lion plate. He is armed with a 9mm Schmeisser MP 28/II sub-machine gun; 204 of these were officially issued to each of the four field infantry regiments. Below the gasmask bag in the 'ready' position, two leather triple magazine pouches are worn on the

Branch	Cockade edge, braid, 'metal'	Branch colour	Branch insignia
General Staff	Gold (yellow)	Prussian blue	5-point star
Infantry	Gold (yellow)	Black	Buglehorn
Marechaussee	Gold (yellow)	Black	Buglehorn
Machine gun	Gold (yellow)	Black	Flaming grenade
Anti-tank & anti-aircraft	Gold (yellow)	Black	Winged buglehorn on clipped shield
Tanks	Gold (yellow)	Black	Tank
Cavalry	Silver (white)	Black	Crossed sabres
Artillery	Gold (yellow)	Black	Crossed cannons
Engineers	Gold (yellow)	Black	Greek helmet
Military Motor Service	Gold (yellow)	Black	Wheel surmounted by wing
Military Aviation	Gold (yellow)	Cobalt blue	Rotary engine & 2-blade propeller
Administration	Silver (white)	Crimson	Lion rampant
Army Service Corps	Gold (yellow)	Crimson	5-point star
Topographical service	Gold (yellow)	Green	Theodolite
Medical officers and orderlies	Gold (yellow)	Cochineal red	Staff of Asclepius with laurel wreath
Military pharmacists (and assistants)	Silver (white)	Cochineal red	Staff of Asclepius with laurel wreath
Veterinarians	Silver (white)	Cochineal red	Staff of Asclepius with laurel wreath
Military writers & other general service personnel	Gold (yellow)	-----	Lion rampant
Army priests	Gold	Black	Cross encircled by laurel leaves
Military chaplains	Gold	Prussian blue	Cross encircled by laurel leaves
Royal Military Academy (KMA), Bandung	Gold (yellow)	Black	'MA' cypher & Crown of the Netherlands

belt; these were produced by the KNIL's own artillery construction facility (*Artillerie Constructie Winkel*).

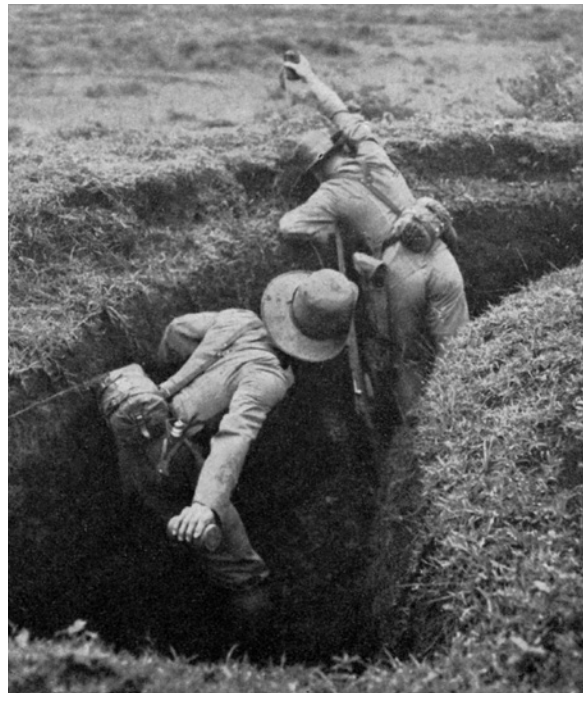
B2a: Representative NCO's collar patch for M1937 tunic, with rank of *fourier* – differenced from sergeant by the blue centre-line on the wide gold stripe.

B3: Manadonese rifleman, 10th Infantry Battalion; Palembang, February 1942

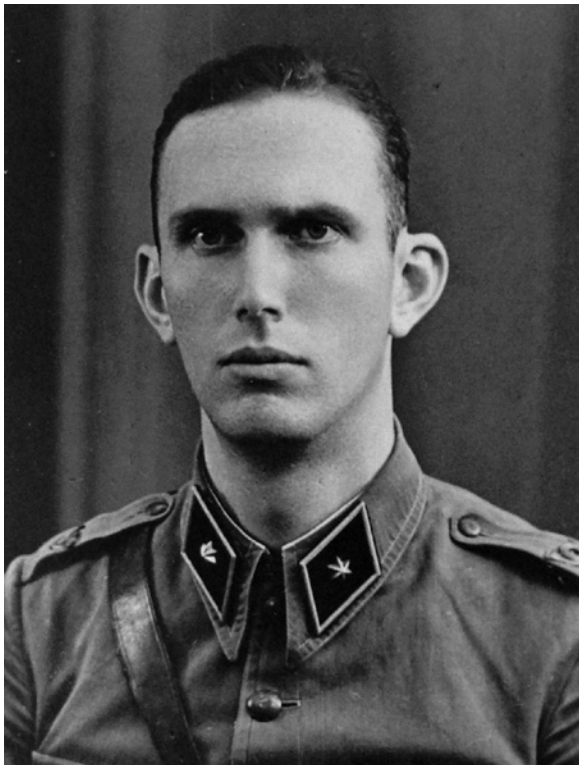
Again, this soldier of 2nd Company (2 Inf X) is in action against Japanese paratroopers. The collar of the 1937 field tunic is worn opened; against regulations, the identity tag is here hanging outside. The 1931 equipment items at the front and sides are the belt and Y-straps, two cartridge pouches, *klewang*, and gas mask. Note that the hat, with Dutch tricolour leather cockade, hangs from the hilt of the *klewang*, and that an issue spoon is tucked into his puttee. In addition to the M95 carbine he is armed with two 1931 'offensive' grenades in small cylindrical bags from his belt.

C1: Dutch infantry second lieutenant , 1941–42

This commander of an infantry platoon wears pre-M1937 field uniform with puttees. His rank collar patches, here with the 3-point rear edge, are in the black of the combat branches, edged with gold cord and bearing the single silver star of *tweede luitenant*. His shoulder straps bear bronze infantry-branch buglehorn badges, and a cord round the neck secures a whistle in his left breast pocket. The 'Sam Browne' belt supports (left to right end, from buckle) a binocular case, *klewang*, canteen, and holstered M11 pistol. He has a gasmask bag slung at his left hip and a map case at the right, and an open Bézard compass hangs from his neck.



Another illustration from the 1935 manual, showing men in a prepared trench throwing the cylindrical concussion ('offensive') hand grenades introduced in 1931. Note on their belts the covered mess kit, and also (right) an entrenching tool or *patjolpik* in a cloth carrier. (Private collection)



Studio portrait of 2nd Lt H. van Zanten wearing M37 field uniform with removable rank-and-branch patches attached to the collar (compare with Plate C1). The dull bronze buglehorn badges of the infantry branch are displayed on the shoulder straps. Van Zanten and his group initially managed to evade captivity after the surrender of 9 March 1942, but the following year he was captured and executed by the Japanese. (KTOMM Bronbeek)

C1a: Representative collar patch for M1937 tunic, with rank for captain (*kapitein*, three silver stars) of general staff (*generale staf*, Prussian-blue ground).

C2: Indonesian sergeant 2nd class, 5th Cavalry Squadron; West Java, 1942

Cav 5 was the KNIL's sole remaining mounted squadron, for security and reconnaissance missions. This native *wachtmeester 2de klasse* wears 1937 field uniform with reinforced breeches, and leather gaiters for mounted troops; for ranks below warrant officer these had three buckled straps. His rank is indicated by the single silver stripe on the collar patch. Cavalrymen were armed with the M95 cavalry carbine with bayonet, and the cavalry sabre. The carbine was slung on the back and secured to the belt by an extra strap, while the sabre was attached to the left of the saddle.

C3: Lieutenant-colonel, Army Service Corps, Div III; East Java, 1942

Each of the three divisions on Java included a lieutenant-colonel of the Army Service Corps who was responsible for ordnance and supply. This *intendant* wears the new field uniform introduced in September 1941, featuring an open-collar shirt that was worn with either shorts and long socks or riding breeches. The collar rank insignia (compare with C3a) are of field officers' gold 'W'-pattern braid, edged with branch colour (crimson) and bearing two silver stars. The uniform could be worn either with this 1941 field service cap with a cloth chinstrap, or a peaked service cap. The front flap of the *bivakmuts* is edged with branch colour, above, for field officers, a gold piping; the latter also appears along the top edges of the crown. The bronze branch badge is displayed at the right front of the cap, and on the shoulder straps. The leather lanyard of the M11 pistol is worn to the neck, and a two-magazine pouch on the left front of the belt.

C3a: Representative collar patch for M1941 field shirt, with rank for *kolonel* (three stars, on field officers' gold braid ground), edged with black of combat branches.

D1: Eurasian tank crewman, 1940

This special uniform was introduced for tank crews at the turn of 1939–40: a 4-button shirt (*vechtwagenhemd*) with a closed flat collar and flapped breast pockets, worn tucked into 'driving trousers' with 5 loops for a leather belt, which were confined by mounted troops' leather leggings. The rather shapeless black beret was officially worn in the French style, pulled to the left side. It bore above the right eye a silver badge of a tank encircled by a wreath.

D1a: Tank branch insignia, worn on shoulder straps in 'handed' pairs (here, left side – the presentation used in the wreathed silver beret badge).

D1b: Representative branch badge of the Anti-Tank/ Anti-Aircraft branch.

D2: Dutch private 1st class tank driver, 1941

The armoured vehicle overall had breast pockets, 'slash' side pockets, and flapped pockets on the outside of the lower legs. It could be worn over the tank crew uniform or directly over undergarments. Rank collar patches were applied – here with the single red stripe of senior private. This tank driver is wearing a brown leather crash helmet with cruciform skull pads and earphone housings. The US Army's 1937 'Helmet, Tank-Drawing #C-66424' – with big external 'donut' padded ring – was also worn, probably delivered with the Marmon-Herrington tanks.

D3: Lieutenant-General H. ter Poorten, March 1942

LtGen Hein ter Poorten, Commander of the KNIL and of ABDACOM land forces, was photographed wearing a grey-green 1941 field shirt tailored with short sleeves, and straight trousers, with low laced shoes. The peaked service cap in contrasting woollen cloth is from his temperate-climate uniform; it has a black 'W'-weave silk braid band piped gold at top and bottom; a gold-and-orange cockade; and two rows of gold oakleaves on the black leather peak. The general was commissioned in the artillery, and displays that branch's crossed cannons on his shoulder straps. The collar insignia are made of brass plate engraved with a repeating 'W' pattern, with four silver stars. The holster at his left hip probably holds a 1908 Colt .32 pistol.

ML-KNIL uniforms

From 1926 officers, sub-lieutenants, candidates, warrant officers, and pilots and trainee pilots below the rank of warrant officer of the KNIL's air component, from 1939 named the *Militaire Luchtvaart* (ML-KNIL), wore a dark khaki uniform with an open-collar tunic, over a light khaki long- or short-sleeved 'sports' shirt and black necktie. The tunic had lapel rank insignia directly attached; the same pockets as the Army uniform; and an integral cloth belt with

a bronze frame buckle. The trousers were worn with flying or riding boots, or tall gaiters and shoes of black or brown leather. When in shirtsleeve uniform, rank was displayed on black cloth triangles at the ends of the shoulder straps. (See under E1 & E2 for headgear, and E3a for rank insignia).

E1: First lieutenant pilot/observer, ML-KNIL, 1930s

The service cap has a black leather chinstrap and peak, a black band in 'W'-pattern weave, and a gold-and-orange cockade. The collar-points of the shirt are secured by a metal pin beneath the knot of the necktie. The rank insignia of two silver stars are pinned to the upper lapels one above the other. The shoulder straps display the bronze branch badge of a rotary engine and two-blade propeller, and the bronze 1932 'wings' badge of a qualified pilot/observer **(E1a)** is pinned above the left breast pocket. The Sam Browne belt, holstered M11 pistol and magazine pouch were regulation.

E2: Sergeant pilot, ML-KNIL, 1940–41

The field service cap has the front flap edged in the light blue branch colour, as introduced on 6 July 1940. The short-sleeved 'sports' shirt in a paler shade of khaki is worn with the black tie, again with a metal collar-pin. The badge of rank on the shoulder straps of working and flying clothing was in the form of a black triangle with a system of silver and gold stars, bars, half-ball studs and lozenges; for sergeant it bore a single gold bar. The uniform is completed by M1926 riding breeches and black riding boots, though leather leggings with ankle boots were also worn.

E3: Officer candidate pilot, Vliegtuiggroep III; Singapore, December 1941

This pilot of an ML-KNIL Glenn Martin WH3 from VLG III is one of 22 bomber crews ordered to Singapore on 8 December 1941 to operate alongside the RAF; all remaining Dutch aircraft were recalled to Java on 22 January 1942. He wears a dark khaki flight suit and leather flying helmet (bomber pilots were not issued goggles, though other aircrew were), and is equipped with an American AN1936 seat-type parachute pack and harness produced by the Irvin Air Chute Company. On the shoulder straps of his flight suit he displays the rank badge of *vaandrig*: a black triangle with two half-ball metal studs in gold (forward) and silver. Some ML-KNIL personnel in Singapore received RAAF khaki shirts and shorts.

E3a: Representative ML-KNIL shoulder rank insignia for *majoor*. Field officers wore 3-1 silver stars above a gold bar; captains and lieutenants, 3-1 silver stars; sub-lieutenant, 2 silver half-balls; officer candidate, 1 gold (forward) & 1 silver half-ball; warrant officer, 1 silver half-ball; sergeant-major, gold transverse lozenge; sergeant, vertical gold bar & lozenge; corporal, the same in yellow cloth.

F1: Dutch LMG gunner, Marinebataljon, 1942

The Naval Bn was formed on 2 March 1942 from companies of marines and the Naval Security Section (*Marine Bewakings Afdeling*, MBA). This 1940 'landing dress' was based on the KNIL M37 field uniform, but with bronze anchor buttons, and rank insignia of the Royal Netherlands Navy. The steel Milsco helmet shows a crowned fouled anchor painted in yellow; some men alternatively wore the Royal Netherlands Navy M34 helmet, with the badge in white metal. This seaman is armed with a captured Italian Breda M30 LMG supplied by Britain, and has new locally made light brown leather equipment, with a large magazine pouch on his right and a smaller tool-and-accessories pouch on his left.

The Javanese prince who commanded the Legion of Mangku Negoro, wearing the new September 1941 field shirt and the shorts introduced shortly afterwards (compare with Plate C3). Note the triangular arrangement of the colonel's rank stars on his collar patches. (KTOMM Bronbeek)

F2: Dutch recruit, Colonial Reserve; Netherlands, 1939

Most European recruits reported to the Colonial Reserve base at Nijmegen. After a maximum 3-month training period, a selected minority were transported by mail ships to the NEI or Surinam. A second group of 'recommended service members' completed a year's training at Nijmegen to qualify as infantry provisional corporals. This recruit wears the temperate-climate service uniform with peaked cap, resembling that worn in the tropics but made of pale grey-green serge instead of cotton. The cap, with its crown bent into a distinctive shape at the front, has a darker green band with a silk cockade. Over his arm he carries the dark blue double-breasted 1909 overcoat based on the Dutch Army design.

F3: Dutch rifleman, Town Guard; Java, 1941

These local *stadswachten* consisted of European men who were exempt from compulsory service in the reserve, militia and home guard, and of Indonesian and Chinese volunteers. They received limited military training in the evenings after their working day, and carried out sentry duties. Town and Rural Guards received

European soldier wearing a peaked service cap and a working overall. Rank insignia are just visible displayed on black triangles on the shoulder straps, as by the airmen in Plate E. Pre-dating the special grey-green tank crew overall (see Plate D2), a blue working overall had long been available to all branches. This had a flat closed collar, shoulder straps, buttoned cuffs, flapped and buttoned breast pockets and 'slash' trouser pockets, an integral cloth belt, and an 8-button fly front; the buttons were of black bone. (NIMH)

this 3-button open-collar shirt with 'French' cuffs in 1940; it is worn with the usual 'bamboo hat', trousers, puttees and field shoes, and note the bronze badge on the left breast. The weapon is the M95 rifle with bayonet; equipment is limited to belt, Y-straps, a single pouch, and (at the back) a canteen.

F3a: The 5cm badge bore either '*Stadswacht*' (Town Guard) or '*Landwacht*' (Rural Guard) below the Dutch coat of arms centred in the star. This latter was sometimes replaced with the town arms of the larger municipalities.

F3b: Representative collar patch for M1941 field shirt, with rank for Dutch sergeant 1st class; this gold braid is of non-standard weave.

G1: Eurasian seaman, Marinevendel; Djakarta, 1941

The 'Naval Squad', part of the Royal Netherlands Navy, was recruited from civilian personnel of the Navy Dept in the capital. With about 40 men, its task was to defend the department's buildings in times of emergency. This seaman 3rd class 'for special services' (VSD) wears the circular silver *Marinevendel* crowned-anchor badge on the breast of a Town Guard shirt, but with short sleeves and bronze anchor buttons. The hat brim is folded in the characteristic naval manner, and the black band has gold Gothic lettering '*Koninklijke Marine*' (Royal Navy). The Navy's bamboo hats were dyed green from 1940. The Royal Netherlands Navy equipment has a belt with a brass buckle plate bearing a white metal crowned fouled anchor **(G1a),** and distinctive Navy ammunition pouches and Y-straps. He holds the Navy bread bag with attached water bottle, normally worn on the back of his belt, and the ubiquitous M95 rifle.

G2: Chinese medical volunteer, Civil Air Defence Service; Djakarta, 1942

From late 1937 a Civil Air Defence Service (*Luchtbeschermingsdienst*, LBD) was established in various localities. An overarching territorial organization for a given area, e.g. 'Kring I Batavia', provided the observer, alarm, communications and blackout services, while local sectors provided auxiliary police, fire, medical, decontamination, clearance, repair and construction services. If necessary, male and female Dutch subjects aged between 18 and 60 could be called up for compulsory civil defence service, but apart from a few professionals the personnel were mainly volunteers.

The LBD had no established uniforms, and in some places wore civilian clothes or grey-green overalls. In the Kring I Batavia area a blue overall and field service cap were typically worn, and the overall was adopted throughout the NEI from January 1942. It had an open collar, short sleeves, breast pockets and an integral cloth belt; 'LBD' was displayed in black on a white patch above the left breast pocket. The issued equipment is an Army gas mask and possibly a canteen. Members of the teams to be deployed on the streets during air raids received steel helmets from the beginning of 1941. The KNIL model was too heavy and costly, so a Chinese-made version of the German M1935 was obtained, fitted with an elasticated web chinstrap; these were also used by the Town Guards in Surakarta and Medan, and by the Naval Guard Service. This volunteer is a stretcher-bearer, and apart from a skein of general-purpose light rope he also carries a pair of webbing stretcher-support straps with interwoven red and blue lines, here twisted into a confusing tangle of canvas around his torso when not in use.

G3: Indonesian constable 2nd class, Field Police

This barracked service, 9,300 strong in 1939, provided preventive policing in rural areas; there were also town and village police at lower level, and a repressive regional detective branch (*Gewestelijke Recherche*). The constable is wearing the khaki field dress introduced in 1921, the 4-pocket, 6-button tunic having an old-fashioned stand-and-fall collar. The brown-dyed 'bamboo hat' bears a black badge with the Dutch arms **(G3a)**. On 1 August 1935 the rank insignia of junior police personnel were moved from both cuffs to a removable patch on the left sleeve only, with 5mm-braid outline chevrons on khaki;

the town police displayed orange braid and the field police blue. The brass cut-out personal number (*volgnummer*) was also moved, from the left side of the collar to the left breast pocket flap; note also the whistle-chain from that pocket. Parts of the NEI police were militarized after mobilization; such constables wore an orange armband, probably with black-printed coat-of-arms, around the left upper sleeve. The policeman is armed with a slung M95 carbine, and a *klewang* strapped to the front fork of his bicycle; on the cross brace over the left shoulder (hidden at this angle) is a cartridge pouch on the right hip.

H1: Indonesian seaman, Militarized Government Navy, 1940

The *Gouvernements Marine* was a civil service that manned vessels for the transport of government personnel and goods, for anti-smuggling surveillance, laying undersea cables for the telegraph network, and conducting hydrographic surveys. In 1942 the service had 34 vessels, 234 officers and approximately 1,200 indigenous crew members. From 1929 the Royal Netherlands Navy had increasingly asked the service to perform auxiliary military duties, and it was militarized on 2 September 1939. This seaman is in white full dress: a sailor's cap, jumper with red collar and cuffs, red-and-white striped vest, long trousers and black shoes. The black cap 'tally' bears gold Gothic lettering '*Gouvernements Marine*'. His new military status is shown by the orange armband with an oval enamelled badge **(H1a)**; this displays the arms of the kingdom complete with supporters, above '*Gemilitariseerde Gouvernements Marine*'.

H2: Dutch driver, Women's Auto Corps, 1941

Women played a full part in the mobilization of the European population. In Djakarta on 26 November 1940, Mrs M.C. Lulof-Mehrengs established the *Vrouwen Auto Corps* (VAC) on her own initiative (the often-quoted form *Vrouwen Automobiel Corps* is incorrect). The VAC trained drivers to operate cars, ambulances and trucks for the Royal Netherlands Navy, the KNIL, the Town and Home Guards and the Civil Air Defence Service. General Motors provided training at its large assembly plant at Tanjung Priok, and also made the necessary vehicles available. The women were not allowed to transport ammunition, and Indonesian drivers of the Volunteer Car Driver Corps (*Vrijwillig Autobestuurders Korps*, VAUBEC) would take over the women's duties in the face of the enemy. Compulsory civil service applied to the VAC in wartime; it had approximately 400 members in December 1941.

VAC members wore a khaki cotton working uniform of short-sleeved blouse, long trousers, and a cap or, for service dress, an Indian-pattern pith helmet; a leather shoulder bag was also regulation. Small enamel VAC badges **(H2a)** were worn on the blouse lapels, and a larger version on the sun helmet. Women classed as 'A drivers' (of cars, vans and lorries) wore a green letter 'A' on the left upper sleeve.

H3: Eurasian volunteer, Volunteer Aviator Corps, Army branch; September 1941

The *Vrijwillig Vliegercorps* (VVC) was established in March 1941. It offered men aged between 17–18 and 27 free flight training to obtain the military (M) licence in the Army or the sport (A) licence in the Navy, after which they had to be available for further training in the ML-KNIL and MLD. At the outbreak of war a few trainees had obtained the A licence, but none the M licence.

The trainees received their khaki-brown uniforms in September 1941: field service cap; open-collar tunic with shoulder straps, pleated breast pockets and 'bellows' skirt pockets with pointed flaps, pointed cuffs, and integral cloth belt; khaki shirt and tie; shorts, grey-brown socks, and low brown shoes. Trainees destined for the ML-KNIL had orange edging on the front flap of the field cap and an orange 'V' on the left upper sleeve, and those for the Naval Air Arm the same in blue. A miniature VVC 'wings' badge was worn above the left breast pocket, to be replaced with a larger version when the licence was obtained.

Captain C. Giebel photographed wearing the M26 dark khaki field uniform of the *Luchtvaartafdeling*, here with a field service cap (compare with Plate E2). The three stars of his rank are just visible, stacked two-above-one on the open tunic collar, and note also the integral cloth belt. Black riding boots could be worn instead of these leather gaiters and laced ankle boots. (KTOMM Bronbeek)

INDEX

Page numbers in **bold** refer to illustrations and their captions

ABDACOM 24, 33
Aceh 9, 42
air corps 3
Air Defence Artillery Corps 14
aircraft 23–24, **23**
airfields 33, **34–35**
allied reinforcements 37
Ambon 6, 8, 37
armoured cars 15, **17**, 22
armoured personnel carriers 12, **18**, 22
Army Formation Decree (*Legerformatiebesluit*), 1937 9
Army Service Corps 19, **C3**(**27**, 44)
artillery 13–14, **15**, 21, 22
  anti-aircraft 14–15, **16**, 22
  anti-tank guns **21**, **33**

Balikpapan 3, 14, 37
Bandung **4**, 6, 14, 33, **33**
Borneo 9, 37
branch-of-service insignia **A1a**(**25**, 42), **C3**(**27**, 44), **D1a–b**(**28**, 44), 43
Brendgen, Captain J.H.J. **4**
British and commonwealth forces 33
Brown, Maj J.H. 36
budget 3

casualties 18
cavalry **4**, 15, **17**, 21, **C2**(**27**, 44)
chronology 38–39
Civil Air Defence Service **G2**(**31**, 46)
Coastal & Air Defence Artillery Corps 14
colonial authorities and government 3, 6
Colonial Reserve **F2**(**30**, 45)
command and control 7–8
composition 4–7
conscription 4, 6
counter-guerrilla warfare 9

defence concept 3–4
defence preparations 24, 33–34, **33**
dispositions 8
district commanders 8
Djakarta (Batavia) 7, 14, 33, **33**
Dremmen, Pte C.G. **9**

engineers 15–16
equipment **7**, **9**, **A**(**25**, 42), **B2-3**(**26**, 43), **C1**(**27**, 43), **F3**(**30**, 45–46), **40**, 41–42, **42**
  Marechaussee Corps **B1**(**26**, 42)
  Royal Netherlands Navy **G1**(**31**, 46)
ethnic composition 4–5, **4**, **5**, **6**

Field Army Headquarters 7
field infantry 8, 9, **12**
Field Police **G3**(**31**, 46–47)
French Indochina 4

garrison infantry 8, 10, 20
gas masks **B3**(**26**, 43), **40**, 42
Giebel, Captain C. **47**

headgear
  bamboo hat **4**, **12**, **B1**(**26**, 42), **G1**(**31**, 46), **F3**(**30**, 45–46), 40, **42**
  beret **14**
  field cap 41
  hats **15**
  helmets **6**, **A**(**25**, 42), **B2**(**26**, 42–43), **F1**(**30**, 45), **33**, **37**, **40**, 41
  service cap **C3**(**27**, 44), **D3**(**28**, 44), **E1–2**(**29**, 45), 40, **46**, **47**
Hitoshi, LtGen Imamura 37
Home Guard 4, 5–6, 8, 20

indigenous auxiliary corps 7, 20, **20**, **45**
infantry organization 8–11
insurgents 42
internal security 3, 5, 6, 20

Japan and Japanese forces 3, 4, 37
Japanese landings 34, **34–35**
Java 3, 6, 7, 8, 14, 20, **20**, **F3**(**30**, 45–46)
  defence preparations 33–34, **33**
Java Army 24, 34–36, 37

languages 5
Lavarack, LtGen Sir John 36–37
Legion of Mangku Negoro **45**
LMG gunners **A1–2**(**25**, 42), **F1**(**30**, 45), **43**
logistics 19–20
Luijke Roskott, Capt R.J. 12

machine guns 9, 10, **12**, 21, 22, **42**
Madura 3, 8, 20
Malacca 24, 37
Malay Barrier, the 24, 33
Malaya 24
Manado 6, 37
Marechaussee Corps 9, 10, 20, **B1**(**26**, 42)
Marinebataljon **F1**(**30**, 45)
medical service 18–19, **19**, **G2**(**31**, 46)
Militarized Government Navy **H1**(**32**, 47)
military districts 8
Military Motor Service 17–18
military service 4, 6
Militia 5–6
ML-KNIL 23, **23**, 24, **E**(**29**, 45), 44 47
Mobile Unit 12
mobilization 5–6
modernization programme 3–4
mortars **13**
motor transport 17–18
Motor Transport Service 15–16, **A3**(**25**, 42)
motorcyclists 15
motorization 4, 7, 11, 14
  artillery 14

Naval Air Arm 47
Naval Squad **G1**(**31**, 46)
NCOs 4, **4**, 5, 7, 9, **10**, **A3**(**25**, 42), **B2**(**26**, 42–43), **C2**(**27**, 44), **E2**(**29**, 45), 40
Netherlands, the, invasion and occupation of 3, 6, 22
Netherlands East Indies 3, **34–35**
neutrality enforcement 3

officers 4, 5, 7, 9
  equipment **C1**(**27**, 43), 41
  Marechaussee Corps **B1a**(**26**, 42)
  ML-KNIL **E1**(**29**, 45)
  rank insignia **B1a**(**26**, 42), **C1**(**27**, 43), **C1a**(**27**, 44), **C3**(**27**, 44), **C3a**(**27**, 44), **E1**(**29**, 45), 40, 41, **44**, **45**
  uniforms **3**, **4**, **C1**(**27**, 43), **C3**(**27**, 44), **45**, **47**
  weapons **C1**(**27**, 43), **C3**(**27**, 44), 20–21
organization
  artillery 13–15
  cavalry 15
  command and control 7–8
  engineers 15–16
  field battalions 5, 9, 10
  indigenous auxiliary corps 20
  infantry 8–11
  Java Army 34–36, 37
  logistics 19–20
  medical service 18–19
  mobilized 24
  motor transport 17–18
  regimental 9–10, 11
  rifle companies 5
  signals 16–17
  tanks 12
overvalwagen 12, **18**

Philippines, the 37
pilots 23
Poorten, Lieutenant-General Hein ter **3**, **D3**(**28**, 44)
procurement 22
purchasing commissions 22

quality 36–37

radio stations 16
rank insignia **A3**(**25**, 42), **A3a**(**25**, 42), **B1a**(**26**, 42), **B2a**(**26**, 43), **C1**(**27**, 43), **C1a**(**27**, 44), **C3**(**27**, 44), **C3a**(**27**, 44), **D2**(**28**, 44), **E1**(**29**, 45), 40, 41, **44**, **45**, **46**
replenishment system 5
role 3, 5
Royal Netherlands Indies Ordnance Commission 22
Royal Netherlands Navy 3, 46, 47
Rural Guards 7

short-term contracts 6
signal companies 15–16
signals 16–17, **18**
Simpson, Brig C.H. 16
Singapore 24
strategic importance 3
strength 7, 8
Sturdee, LtGen V.A.H. 37
Sumatra 8, 37
Surabaya 6, 14, **16**, 33, **33**, 34
surrender 37

Tank Battalion 12
tank crews **D1–2**(**28**, 44)
Tank Experimental Unit (*Proefafdeling Vechtwagens*) **4**, 11–12
tanks 3, 11–12, **14**, 22
Tarakan 3, 14, 37
territorial commands 8, 24
Timor 8, 37
Town Guards 6–7, **7**, **F3**(**30**, 45–46)
training 5, 45
Transport Service 19
troop trains 19–20
trucks 11, 12, **16**, **17**

uniforms
  artillery **15**
  cavalry **C2**(**27**, 44)
  M37 field **4**, **6**, **9**, **12**, **15**, **A1–2**(**25**, 42), **B1**(**26**, 42), **B3**(**26**, 43), **C2**(**27**, 44), **37**, 40–41, **40**
  M1941 **C3**(**27**, 44), **45**
  ML-KNIL **E**(**29**, 45), 44
  naval **F1**(**30**, 45)
  officers **3**, **4**, **C1**(**27**, 43), **C3**(**27**, 44), **45**, **47**
  riding breeches **C3**(**27**, 44), 40
  tank crews **14**
  temperate-climate 40
  Town Guards **7**
  trousers 40
  tunics **B1**(**26**, 42), **B3**(**26**, 43), 40, 41
United States of America 22

Veteran Reserve Corps 6
Vickers-Carden Loyd light tanks 11–12, **14**
Vickers-Carden Loyd utility tractor **21**
Volunteer Aviator Corps **H3**(**32**, 47)
volunteers 4, 5, 5–6, 6–7, **G1–2**(**31**, 46), **H3**(**32**, 47)

War Department 7
Wavell, Gen Sir Archibald 33
weapons
  anti-tank rifles **13**, 21
  bayonets **9**, 20, **F3**(**30**, 45–46), 42
  carbines **10**, **12**, **15**, 20, **A3**(**25**, 42), **B1**(**26**, 42), **B3**(**26**, 43), **C2**(**27**, 44), **37**
  cavalry 21, **C2**(**27**, 44)
  grenade launchers 21
  grenades **B3**(**26**, 43), **37**, **43**
  klewang cutlass **4**, **10**, 20, 21, **B1**(**26**, 42), **B3**(**26**, 43), **C1**(**27**, 43), **37**, 42
  light-machine guns **6**, **20**, 21, **A1–2**(**25**, 42), **F1**(**30**, 45), **43**
  officers 20–21, **C1**(**27**, 43), **C3**(**27**, 44)
  pistols **4**, 21, **C1**(**27**, 43), **C3**(**27**, 44)
  rifles **7**, **9**, 20, 22, **F3**(**30**, 45–46), **40**
  sabres **C2**(**27**, 44)
  sporting 7
  sub-machine guns 20, 22
Women's Auto Corps **H2**(**32**, 47)
working overalls **46**

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Author's Note & Acknowledgements

In this text we give most place names in their modern forms, e.g. Djakarta for the former Batavia, Sulawesi for Celebes, etc; others are given in both forms. In the map on pages 34–35 the former names are used.

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Title page photo:

Soldiers of an ethnically mixed KNIL machine-gun company photographed after fighting at Palembang, Sumatra, in February 1942. They wear M37 field dress and have steel helmets, with or without covers, and M39 field service caps; the Indonesian at the left is carrying an M23 Vickers gun. (Beeldbank WO2 NIOD)

Abbreviations used in this text

A	*afdeling* (battalion)
AAD	*Aan- en Afvoerdienst* (Transport Service)
ABDACOM	American-British-Dutch-Australian Command
AHK	*Algemeen Hoofdkwartier* (General Headquarters)
APC	armoured personnel carrier
Arty	artillery
(B)	bomber (sqn, RAF)
Bg	*bergartillerie* (Mountain Artillery)
Bn	*bataljon* (battalion)
Bomb	bomber (sqn or group, USAAF)
Bty	battery (artillery)
Cav + no.	*Eskadron cavalerie* (cavalry squadron)
Cdo ML	*Commando Militaire Luchtvaart* (Military Aviation Command)
CORO	*Corps Opleiding Reserve-Officieren* (Reserve Officers Training Corps)
CSO	Chief Signals Officer
Dep Bn	depot battalion
Div	division
(F)	fighter (sqn, RAF)
(FB)	flying boat (sqn, RAF)
Gi + no.	*Bataljon Genietroepen* (engineer battalion)
GOC	General Officer Commanding
(GR)	general reconnaissance (sqn, RAF)
GVT	*Groep Vliegtuigen* (Aircraft Group, Naval Air Service – MLD)
HAA	Heavy Anti-Aircraft Regiment (British Royal Artillery)
Inf + no.	Infantry Battalion
JAC	Java Air Command
KMA	*Koninklijke Militaire Academie* (Royal Military Academy)
KNIL	*Koninklijk Nederlands-Indisch Leger* (Royal Netherlands East Indies Army)
Ku Art	*Kustartillerie* (Coastal Artillery)
KV	*kortverband* (short-term contract)
LA	*Luchtvaartafdeling* (Aviation Service)
LAA	Light Anti-Aircraft Regt (British Royal Artillery)
LBD	*Luchtbeschermingsdienst* (Air Defence Service)
Ld	*Luchtdoel* (anti-aircraft)
Mar + no.	Marechaussee Battalion
Mob E	*Mobiele Eenheid* (Mobile Unit)
MLD	*Marine Luchtvaartdienst* (Naval Aviation Service)
ML-KNIL	*Militaire Luchtvaart-KNIL* (Military Aviation Branch)
MMD	*Militaire Motordienst* (Military Motor Service)
PLA	*Pantser- en Luchtafweer* (Anti-Tank & Anti-Aircraft)
Pst	Pursuit (fighter sqn, USAAF)
RA	Royal Artillery (British)
RAF	Royal Air Force (British)
RAAF	Royal Australian Air Force
no. + RI	Infantry Regiment
RNZAF	Royal New Zealand Air Force
Sqn	squadron
TT	*Troepentrein* (troop train)
US	US Army
USAAF	United States Army Air Forces
USN	United States Navy
VAUBEK	*Vrijwillige Autobestuurders Korps* (Volunteer Drivers Corps)
Vd	*Veldartillerie* (Field Artillery)
Vd HA	*Veldhospitaalafdeling* (Field Hospital Service)
Vk A + no.	*Verkenningsafdeling* (ML-KNIL Recce Sqn)
Vl G + no.	*Vliegtuiggroep* (ML-KNIL Aircraft Group)